Arranging for the MODERN DANCE ORCHESTRA

Arthur Lange

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Arthur Lange

Arranging for the MODERN DANCE ORCHESTRA

Arthur Lange

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Acknowledgment

THE preparation of any text-book is an arduous task, and "Arranging for the Modern Orchestra" called for more than the usual amount of detailed work, through the inclusion in it of so many musical examples. In compiling and editing these I have received valuable aid from my associate, Ernest Klapholz, and in the revision and editing of the text I have received much help from Gordon Whyte. I am, indeed, grateful to these two gentlemen for their assistance, and thank them for it. They have helped to make the writing of this book an easier task than it might otherwise have been.

I also wish to thank those publishers who have so kindly allowed me to use excerpts from arrangements I have made for them as musical examples.

ARTHUR LANGE.

FOREWORD

IN writing this book, I have ever kept in mind the practical aspects of orchestral arranging. The problem of arranging for the modern dance orchestra is entirely different from that of scoring for the symphony or concert orchestra, and must be attacked in a different way. There are numerous books which cover the field of orchestration, as such, in a thorough and competent manner. So far as my knowledge extends, however, there has been no attempt made to cover the field of arranging for the modern dance orchestra. That is my excuse, if any be needed, for writing this book.

By the term "modern dance orchestra" I mean the orchestra which is well nigh universally used in the United States to provide music for ballroom dancing. This orchestra is essentially a wind band, augmented by certain other instruments, such as the violin, piano, banjo and drums. Its backbone is a trio of saxophones, reinforced by brass. Individual orchestras may add a variety of other instruments to this foundation, but the wind band must, and does, constitute the main factor in any modern dance orchestra.

The problem of scoring for this orchestra is a distinct and peculiar one, and it has been my endeavor to clarify and explain the methods which I have found most useful in solving this problem. The only test which I have used to gauge the worth of my methods is effectiveness in actual performance.

What I have set down in this book is the fruit of many years' experience in arranging for the modern dance orchestra, and I have included nothing but that which has been tested in performance and found effective. I have illustrated every salient point by one or more musical examples, and these have been carefully selected from many hundreds which I have used or examined.

I have touched but lightly on harmony, counterpoint and composition, since these subjects have been so thoroughly covered by other writers. However, where I have thought that clarity of expression might only be gained by an exposition of these sciences, I have dealt with them so far as they affect the particular problem under discussion.

My aim has been to aid the ambitious orchestra player who has a practical knowledge of musical science by giving him a moiety of theory, but limitations of space prevent me from entering into a complete exposition of the science of music. This subject is so vast that no one book can hope to cover it fully, and the reader who wishes further instruction in it may easily acquire it from other sources.

Nothing that is worth learning is easily learned: a truth which all instrumentalists know full well. Patience, diligence and application are necessary for the acquirement of all knowledge. If the reader will read this book carefully, and make what it contains his own, I believe that he will have at his command the main tools of the orchestra arranger's art. He will at least know what the arranger must do to score effective and practical arrangements for the modern dance orchestra. What he himself does in this field will be colored by his own individuality, but he should be able to gain a knowledge of the art, as a whole, from this book. That has been my purpose in writing it; and if it is accomplished, in even a small measure, my effort will not have been entirely in vain.

ARTHUR LANGE.

ARRANGING

for the

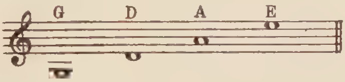
MODERN ORCHESTRA

CHAPTER I.

THE VIOLIN

The Violin is a four stringed instrument. The strings are tuned from low to high: *G, D, A, E.*

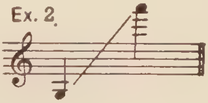
Example 1



The Violin part is written in the *treble clef.*

The most practical range in which to write for the Violin, is from its lowest open string; *G,* to high *A,* on the *E* string.

Ex. 2

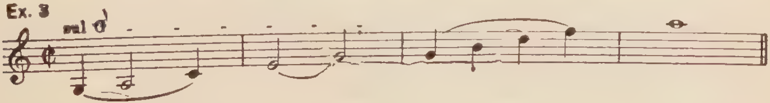


Although it is possible to play higher than shown, only the ability of the performer will warrant writing higher. The Violin is played either with the bow (*arco*), or plucked with the fingers (*pizzicato*).

SOLO AND ENSEMBLE

Fundamentally, the Violin is a melody instrument for both *solo* and *ensemble.* Therefore, melody should be written for the Violin in both instances. For solo rendition, to which only an accompaniment is being played, it is practical to write in any register of the instrument. Many melodies are very effective when played only on the *G* string. When such playing is desired, it is necessary to mark (*Sul G*) over the notes and indicate with a dotted line, the duration of such rendition.

Ex. 3

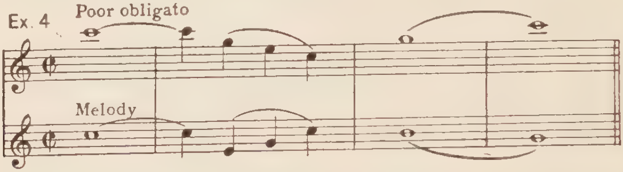


For *ensemble* playing, it is best to write for the Violin in the upper register, so that the tone color can easily be heard over the balance of the orchestra.

OBLIGATO

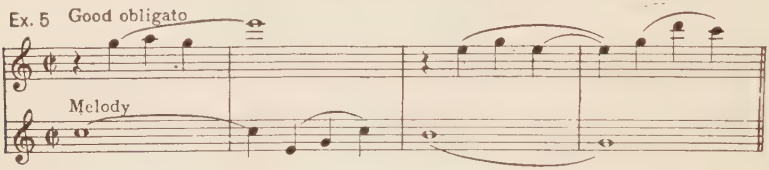
The principle of an *obligato* is *counterpoint,* i. e., a melody played against a melody. Therefore, the composition of the *obligato* should not double with the melody, and should move in different rhythm.

Ex. 4



In the above example, it will be seen that the melody and *obligato* are too closely related. The next example shows the same melody with a more effective obligato. Note, that when the *melody* is sustained, the *obligato* moves, and when the *obligato* is sustained, the *melody* moves.

Ex. 5



When a Violin *obligato* is to be written, the melody must appear in some other instrument, preferably a type of different tone color from that of the Violin. Awkward bowing and fingering should be avoided.

DUETS

Violin *duets* consist of one Violin playing the melody, and the other, harmony, below the melody, or *obligato.* In writing ordinary *duets,* it is necessary to keep the notes of the two Violins as close to each other as possible, making sure that the harmony notes of the second Violin are pleasing, and move parallel with those of the first Violin. In *ensemble* playing, two Violins can either play in *unison, octaves,* or in *duet* form. A flowing *obligato* when written in *unison* for two or more Violins, will penetrate the *ensemble* of an entire orchestra very effectively.

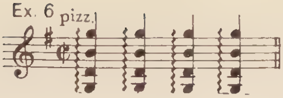
PIZZICATO

Pizzicato on the Violin is produced by plucking the strings with the fingers. This effect has no great volume and should be written only when dainty effects are desired. This style of playing is indicated by the word "pizz."

RHYTHM

Although it is unusual for a Violin to play rhythm in a dance orchestra, the *pizzicato,* in chord form, may be substituted for a Banjo.

Ex. 6



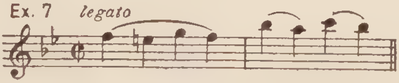
MUTED

The use of a *mute* on a Violin is only effective in very softly rendered *solos* or *obligatos,* and should never be employed when heavy *ensembles* are written. In indicating the use of a *mute* when arranging, it is necessary to give the player ample time for applying and removing the *mute* by inserting a few measures *tacet.*

PHRASING AND BOWING

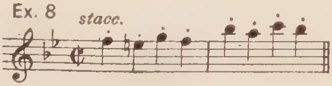
When writing Violin music, it is necessary to indicate the manner in which it should be played. A succession of notes can be played in one or more strokes of the bow. Where two or more notes should be played in one stroke of the bow, it is necessary to put a *slur* over the notes to be included in that stroke. This creates a smooth *legato* effect.

Ex. 7



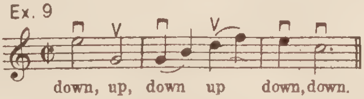
When no *slur* appears over the notes, the player will bow each note separately. When dots appear over the notes he will play each note separately, but in a very short and *staccato* manner.

Ex. 8



Up and *down* bows are indicated in the following manner:

Ex. 9

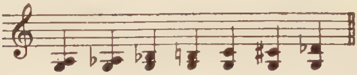


It is only necessary to use these signs when a succession of *up* or *down* bows is desired.

DOUBLE-STOPS

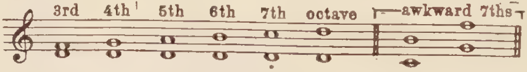
A *double-stop,* played on the Violin, means the playing of two notes simultaneously. Owing to the fact that many double-notes are impossible to play, it is necessary to give an example of all impossible *double-stops.*

Ex. 10.



Each *double-stop* above shown consists of two notes, each of which can only be played on the *G* string, and, therefore, are impossible to be play simultaneously. Possible *double-stops* range from a *second* to an *octave.*

Ex. 11

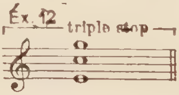


Mostly all *thirds, fifths, sixths* and *octaves* are playable and practical to write; whereas *fourths* and *sevenths* are not. This does not imply that *fourths* and *sevenths* cannot be written; it is only necessary to avoid writing two notes for the same string.

Triple Stops

A *triple-stop* means the playing of three notes simultaneously.

Ex. 12



In writing *double* and *triple-stops* it is necessary for the player to use two or three fingers on the strings at the same time. Therefore, awkward changes from one position to another on the instrument must be avoided.

All the above are the fundamental principles of the Violin. Further instructions of how to write for the Violin will be continued later.

CHAPTER II.

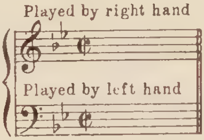
THE PIANO

Since the beginning of dance music the Piano has been utilized as a rhythm instrument. Its duty chiefly consists of playing *accompaniment.*

WRITING

The Piano part is written on two staves, the upper staff, treble clef, which is played by the right hand, and the lower staff, bass clef, which is played by the left hand. The key signature and tempo sign is placed directly after the clef.

Example 1



Before writing a Piano accompaniment, a mental sketch or written outline of the harmonic structure of the melody is necessary. This outline should be worked out in detail when writing the Piano part.

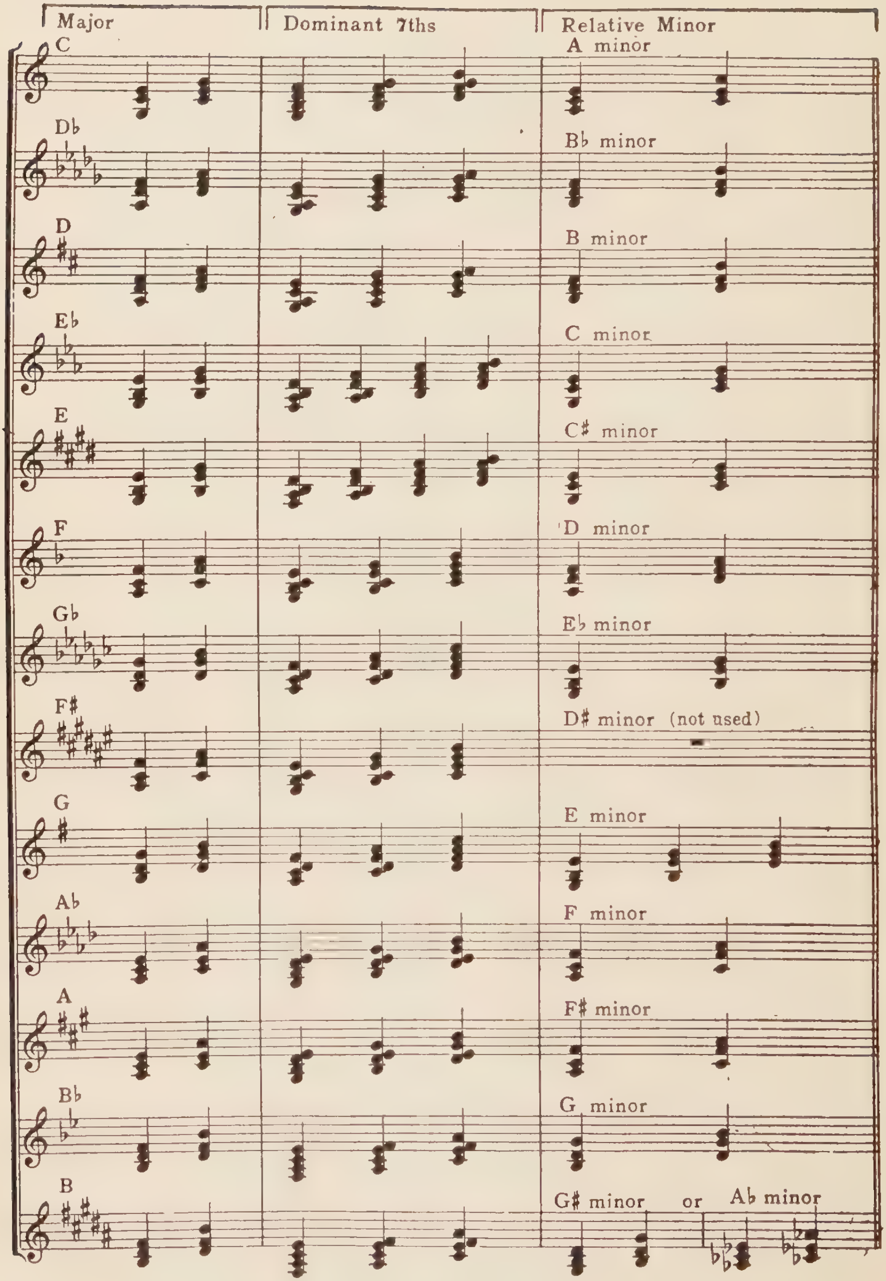
CHORDS

Right hand chords should be confined to the middle register of the Piano. The upper register is used, when unavoidable, in modulations or solos.

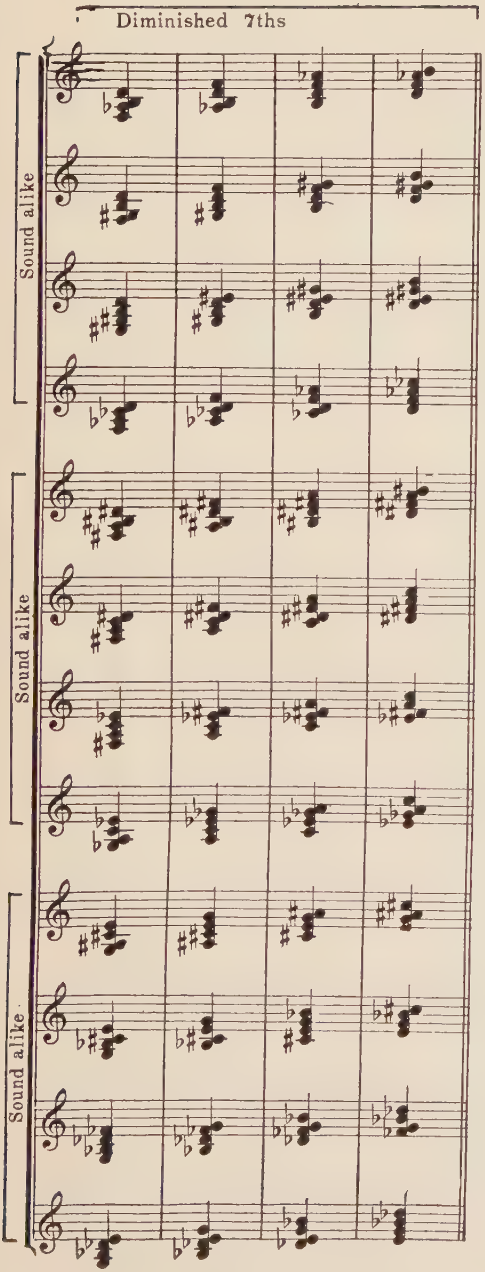
All musical chords have several inversions. Examples 2 to 8 are charts of chords in all keys, showing the inversions of each chord written in the middle register. These inversions are the most suitable for right hand accompaniment, and are written in the upper staff of the Piano part.

Every musical chord consists of three, four or more notes, any one of which can be used as a bass note, written in the lower staff, preferably in octaves. These bass notes should be written in the low register of the Piano; but so as not to interfere with those played by the right hand.

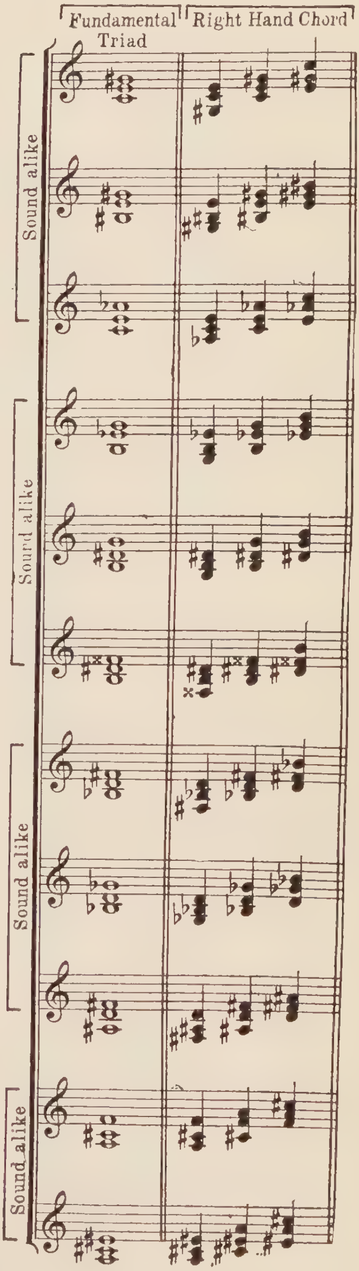
Ex. 2


Major
Dominant 7ths
Relative Minor
C
A minor
D♭
B♭ minor
D
B minor
E♭
C minor
E
C♯ minor
F
D minor
G♭
E♭ minor
F♯
D♯ minor (not used)
G
E minor
A♭
F minor
A
F♯ minor
B♭
G minor
B
G♯ minor or A♭ minor

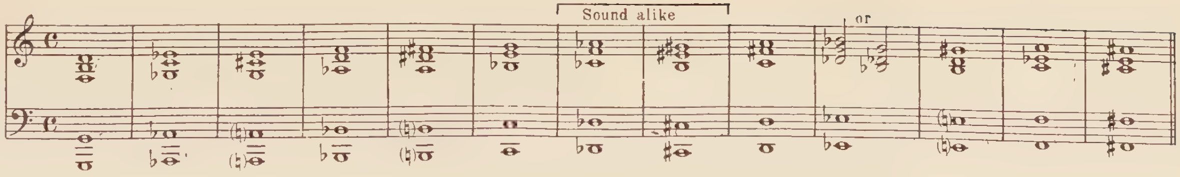
Ex. 3



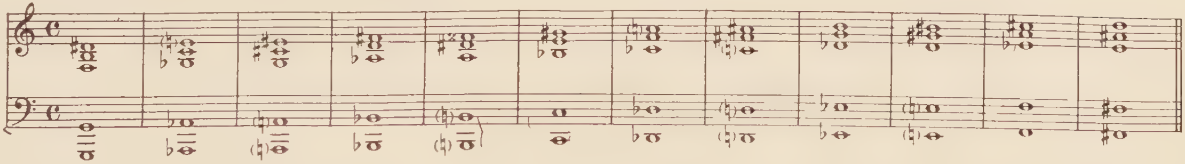
Ex 4 Augmented 5th Chord



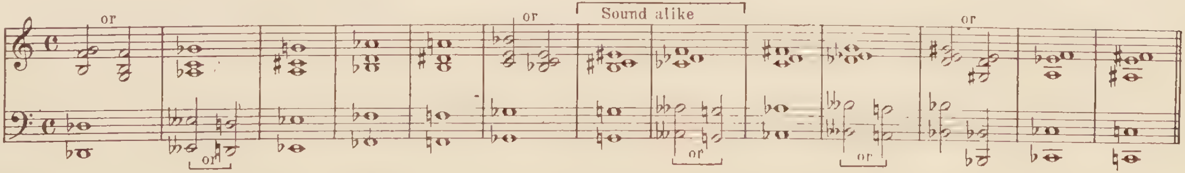
Ex. 5 Chromatic Scale in 7th Chords, showing fundamental basses



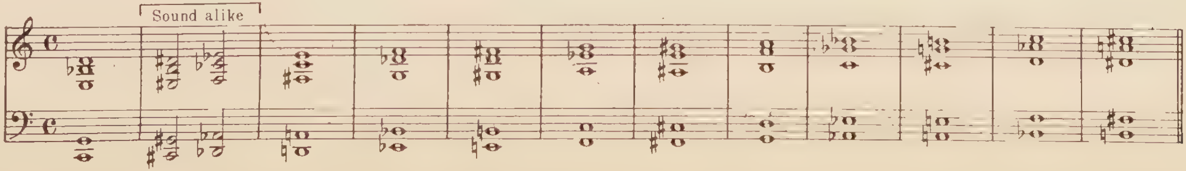
Ex. 6 Chromatic Scale in 7th Chords, with raised 5th, showing fundamental basses



Ex. 7 Chromatic Scale in 7th Chords, showing lowered 5th as Bass

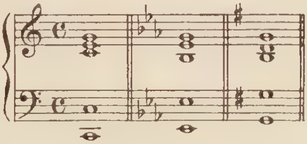


Ex. 8 Chromatic Scale in 9th Chords, showing 2 notes in Bass



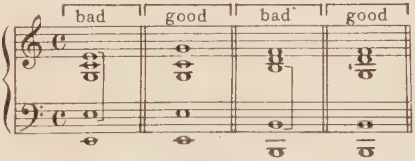
When the bass note of a chord is the fundamental key note, the doubling of the same note in the right hand is permissible. This rule also applies when the 5th of the fundamental chord is written as a bass note.

Ex. 9



The following example shows a C major chord with the *third* written as the bass note. Note that the *third* of the chord *E,* in the first measure, is doubled with that of the chord played by the right hand. This is not good; whereas, the second measure shows the correct and proper way of writing the same chord.

Ex. 10

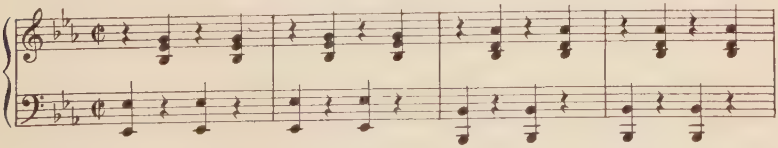


This rule applies to mostly all chords, in which the third is used as a bass note.

ACCOMPANIMENT

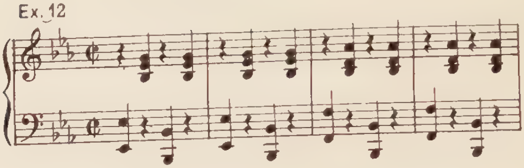
The first principle of Piano accompaniment, is the striking of the bass alone with the left hand, followed by a chord struck with the right hand, as shown below in fox-trot tempo.

Ex. 11



In the above example, notice that the same bass notes are constantly repeated. Although this is not incorrect, it is poor taste, and should only be written when unavoidable. An alternating bass, in which the bass notes move from one interval of the chord to another, is more effective. This style of bass is preferable.

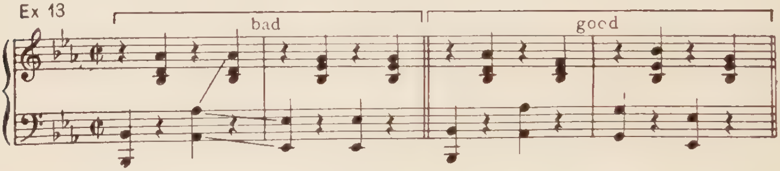
Ex. 12



The above example represents the most commonly used alternating bass.

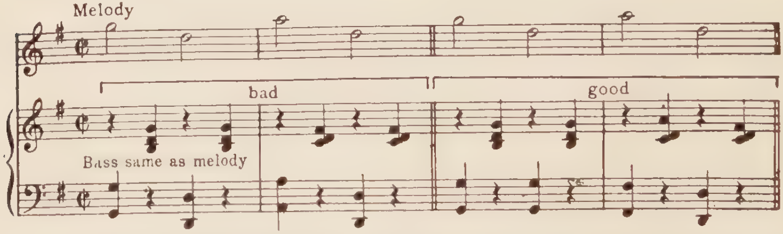
In writing alternating basses for the 7th chord, the 7th of that chord is seldom used as a bass note. Only when such bass notes lead naturally to the bass note of the following chord, with pleasing effect, should it be written.

Ex 13



Doubling the bass with the melody in parallel motion should always be avoided.

Ex 14



In the first two measures of the above example, note that the bass and the melody are both the same notes. This is poor bass part writing, and should be written as shown in the third and fourth measures.

RHYTHM

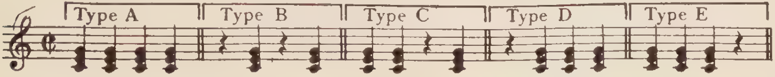
There are many tempos in dance music, such as Fox-trot, (which includes the Charleston), One-Step, Slow Blues, Waltz and Tango.

FOX-TROT

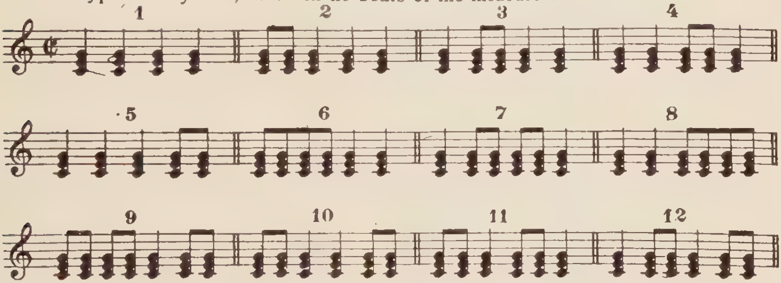
The most commonly used tempo played in American dance music is the Fox-Trot, which consists of four one-quarter beats to a measure, in *Alla-Breve* tempo.

The following illustrates many examples of right hand rhythms:

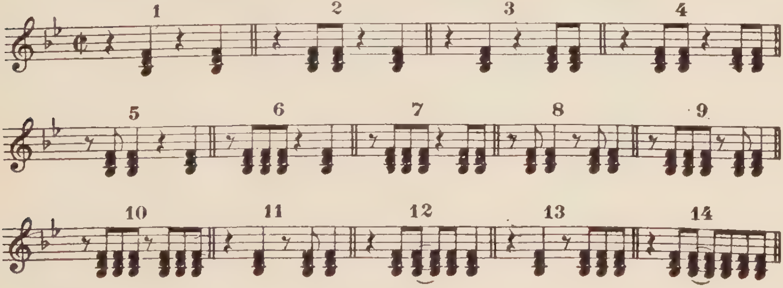
Ex. 15 Most commonly used Rhythms



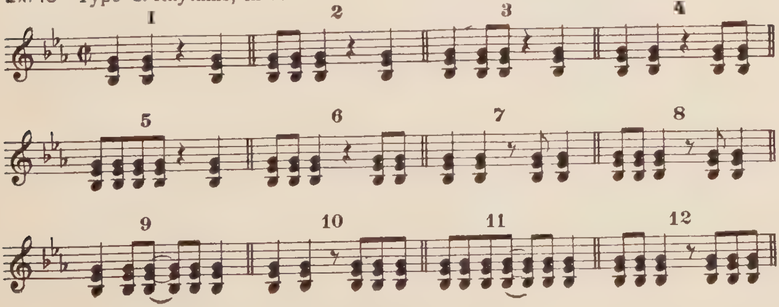
Ex. 16 Type A Rhythms, in which no beats of the measure are omitted



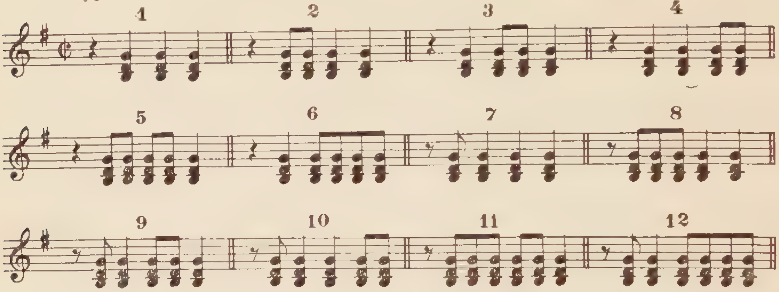
Ex. 17 Type B Rhythms, in which the 1st and 3rd beats of each measure are omitted



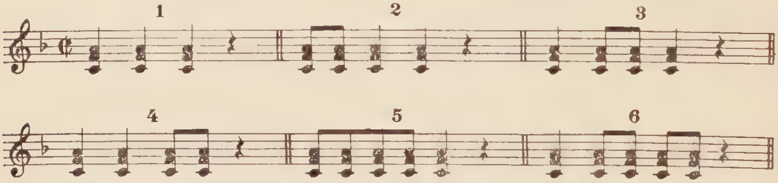
Ex. 18 Type C. Rhythms, in which the 3rd beat of each measure is omitted



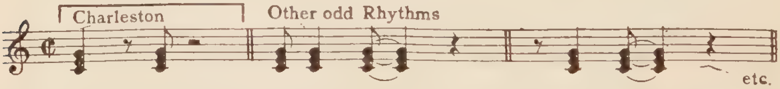
Ex. 19 Type D. Rhythms, in which the 1st beat of each measure is omitted



Ex. 20 Type E. Rhythms, in which the 4th beat of each measure is omitted



Ex. 21



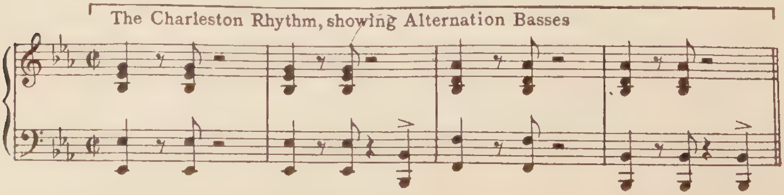
To any of the above right hand rhythms, the bass is added. In rhythm, the bass does not vary as much as the right hand. Although it is possible to write odd rhythms for the bass, it is not advisable to do so. It must be remembered that the basic principle of writing Fox-Trot tempo is to preserve the accented *first* and *third* beat of each measure. Of course, this greatly depends upon the tempo of the composition.

CHARLESTON

The Charleston rhythm presents an exception to the above mentioned rule. The rhythm of the left hand is identical with the rhythm of the right hand. The only difference is that a fourth beat for the left hand can be added at will.

Although it is unusual to use an alternating bass in the Charleston, it is not wrong to use an alternating bass on the fourth beat.

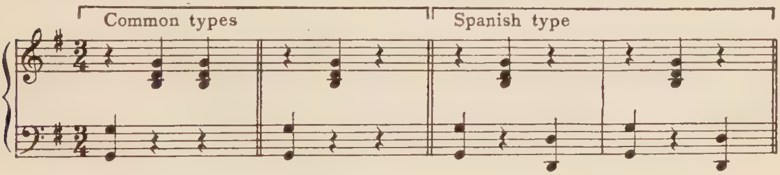
Ex. 22



WALTZ

This rhythm needs little explanation. There is not such variety in this tempo as there is in the Fox-Trot or Blues. In writing this rhythm the accompaniment is mostly influenced by the type or style of the composition. The following example shows several types of Waltz accompaniment.

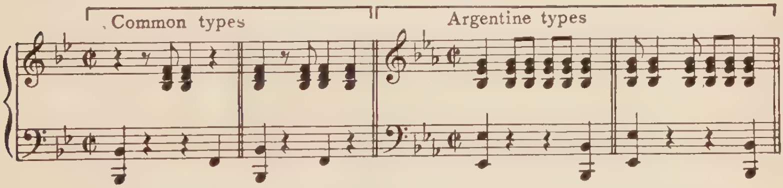
Ex. 23 WALTZ RHYTHMS



TANGO

The Tango rhythm is also very limited. The one most used is the Argentine Tango. The following example shows several types and styles.

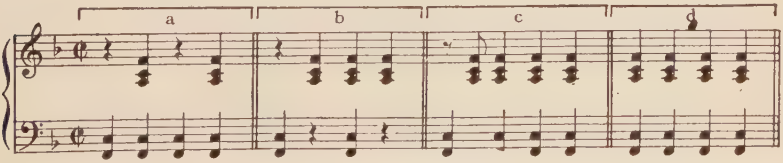
Ex. 24 TANGO RHYTHMS



BLUES

In arranging a slow moving "Blues," writing four beats to the measure in the left hand is appropriate, but it is important that the proper right hand rhythm is used in conjunction with it.

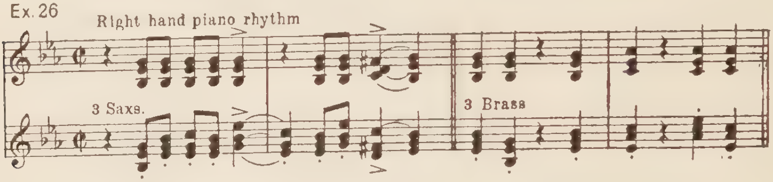
Ex. 25



In the above shown example, the first measure (A), shows *four beats* for the left hand and *after beats* for the right hand. This creates the accent on the second and third beats of the measure. The second measure (B), shows a slight improvement on the first measure. Measure (C), and (D), show the best *rhythmic* and *practical* method of writing this style of rhythm.

The writing for the right hand also greatly depends upon the rest of the orchestration. Many times the rhythm which is played by the Brass or Saxophones, can be strengthened by duplicating the same rhythm on the Piano.

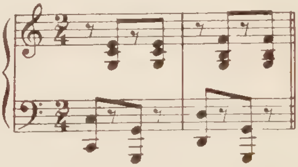
Ex. 26



ONE STEP

The One-Step rhythm is similar to the Fox-Trot rhythm. The only difference is that the former is written in *two-quarter* tempo.

Ex. 27



ENSEMBLE

What has been said up to this point about the Piano accompaniment, applies mostly to general *ensemble* playing with orchestras. It is not advisable to deviate from this form of writing, when a solid rhythm is required. Whenever a Piano stops playing a straight accompaniment, for the purpose of a flourishing arpeggio, or other colorful effect during ensemble playing, a lack of rhythm is noticeable. The playing of a straight accompaniment is also preferable, when used in conjunction with Saxophone, Violin, or any other solo. Of course, in cases where a Bass Violin is present, such effects as arpeggios or variations, are effective and colorful.

SOLO

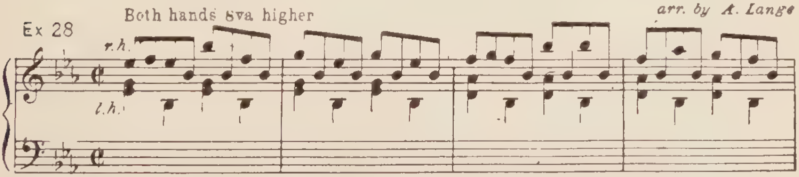
Needless to say, the Piano is a solo instrument, and this fact should not be overlooked when making an arrangement. Solo Piano playing can be executed with just the aid of a drum, or with an accompaniment played with the orchestra, *pp*. It is necessary to arrange the instrumentation in such a manner, that the Piano solo is not covered.

Music-Box

The "music-box" effect has become very popular and is effective in an arrangement of a dainty composition. This effect should not be used too often. In writing "music-box" effects, two different forms of writing present themselves. One of these includes the melody and the other does not. When the melody is simple and lends itself easily to inclusion in the effect, then it may be played alone without the aid of any other instrument. However, if the melody is too awkward to be included, it is best to write the music box effect as an accompaniment. To this is added the melody played by a light-color instrument, preferably Violin *pizzicato* or bells.

MUSIC BOX EFFECT (Including melody)

Ex 28

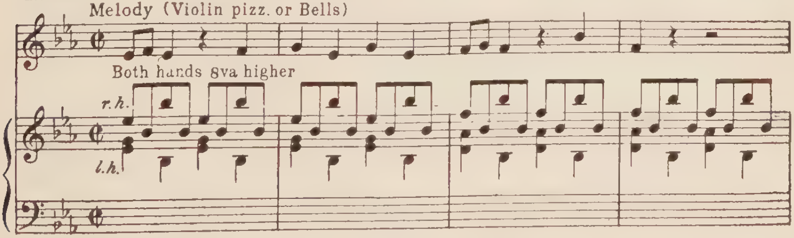


Copyright Leo Feist Inc

The following example shows how to write "music box" effects when the melody is to be assigned to another instrument.

MUSIC BOX EFFECT (not including melody)

Ex. 29



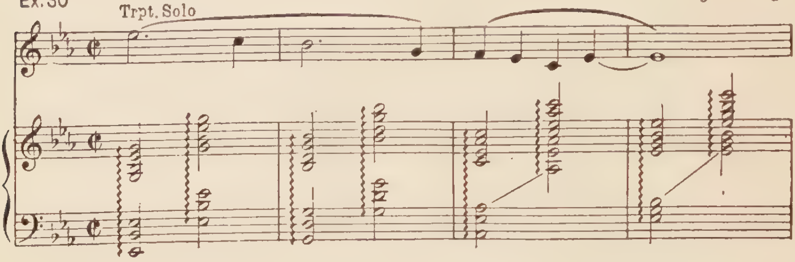
Arpeggio

This effect is very similar to Chimes. The only difference being that it strictly follows the harmonic structure of the composition. This effect is mostly written on the *first* and *third* beats of the measure, only playing on the *second* and *fourth* beats when there is a definite change of harmony. It may be produced in the middle or upper register of the Piano, depending upon the register in which the melody is being played. If the melody is played by the Trombone, Saxophone in lower register, or Violin on the G string, it is best to write this effect so that it may be played an octave higher than written. When the melody is written in the middle or high register, such as Violin, Trumpet, etc., the *arpeggio* effect is also effective in the middle register of the Piano, as shown in the following example.

"RISING SUN"

Ex. 30

by A. Lange



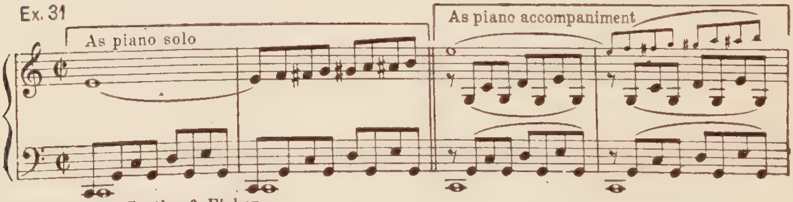
UNUSUAL EFFECTS

At times the Piano is the only instrument capable of producing the effect desired. This will be discovered, when arranging compositions, such as shown in the following example.

"DARDANELLA"

Ex. 31

arr. by A. Lange



Copyright McCarthy & Fisher

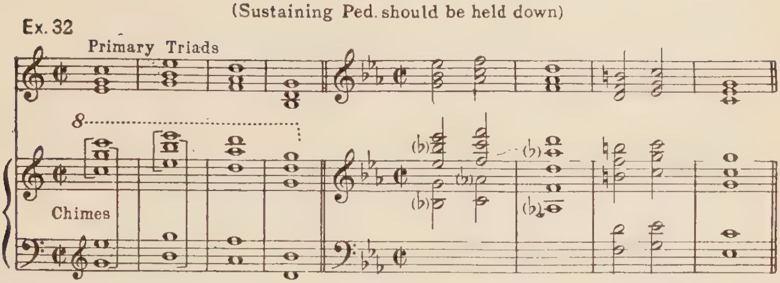
CHIMES

The imitating of Chimes on the Piano is an effect of great importance, when arranging compositions of Pastoral nature. Invariably, such compositions are constructed on very simple and fundamental harmonies, and this fact affords great opportunity for the use of Chime effects.

A Chime chord consists of five notes, primarily a *triad,* in which the tone representing the melody is the upper note. In a succession of Chime chords each respective note is subject to the key signature. Naturally, in the key of C, where there are no sharps or flats, these chords are only played on the white keys of the Piano. This key is best for all Chime effects. In the key of *G, E*♭, or any other key, each individual note of the Chime chord is subject to the *sharps* or *flats* of that respective key.

CHIME EFFECT
(Sustaining Ped. should be held down)

Ex. 32



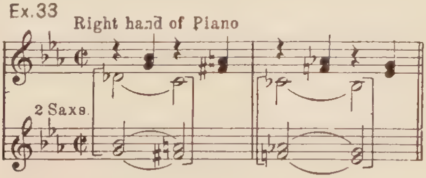
The above example explains the subject more clearly. Note that the melody, or upper note of the *triad,* is doubled in octaves; that the middle note of the *triad* is doubled two octaves apart; and that the lower note of the *triad* is only struck singly without any doubling. This imitates the overtones of a chime. At times a slight dissonance may occur, owing to the fact that the harmony is slightly different from that of the composition. This is only caused by the imitating of overtones, caused by an actual chime beat. The notes represented by the overtone of a chime should not be eliminated in writing the effect.

SUBSTITUTION

In small orchestras, where the Piano acts as a substitute for missing instruments, the tone quality and volume of the Piano is a valuable asset, especially in the middle register, which blends well with the Saxophones. Often a part played by the Piano, in conjunction with other instruments, will act as an added voice.

SUBSTITUTION

Ex. 33

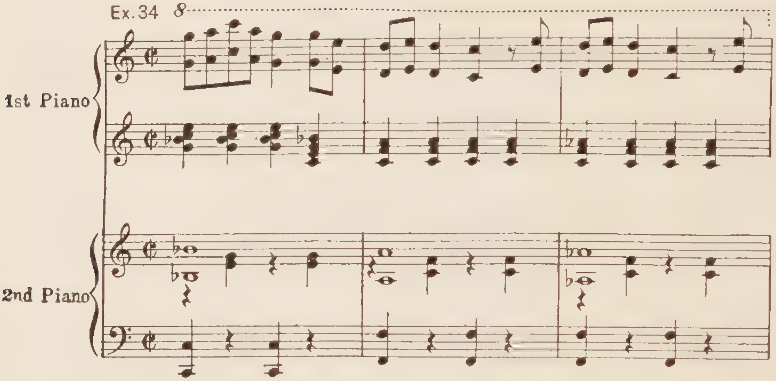


The lower notes of the Piano, played by the thumb of the right hand in a sustained, accented manner, act as a substitute for a third Saxophone. These notes will fill out important intervals of harmony in a similar tone color.

DUETS

When arranging for Pianos, in duet-form, one Piano should play the melody or variation, and the other should play the *counter-melody* and *accompaniment.*

Ex. 34



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When writing for two Pianos, in general ensemble playing, it is permissible to write the same part for both instruments. Invariably, one of the Pianists will deviate slightly from the other at his own discretion.

BREAKS

"Breaks" mostly depend upon the ability of the Pianist, and are very seldom written. However, it is possible to write them, and when a "special break" is desired it is best to write it out, especially if the Pianist is not capable of improvising. In instances where "breaks" for any instrument occur, the rest of the orchestra stops playing.

Further instructions on how to write for the Piano will be explained in conjunction with other subjects.

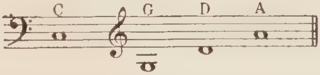
CHAPTER III

THE TENOR BANJO

There are several types of Banjos—viz.: *G* Banjo, Banjorine, and Tenor Banjo. For modern dance music the Tenor Banjo has been accepted as the most practical, the tone quality being more musical than any of the other types.

The Tenor Banjo is a fretted four-stringed instrument, tuned in 5ths—i.e., *C, G, D, A.*

Example 1



This chapter teaches what has been universally accepted as the most practical system of writing for the Tenor Banjo.

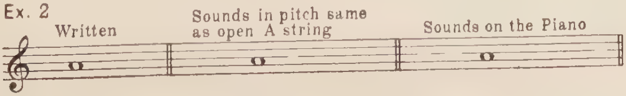
NOTATION

Like the Violin, the Tenor Banjo part is written in the *treble-clef,* but in pitch and in playing register the Tenor Banjo is identical with the Viola, which part is written in the *alto clef.* Then, again, the Tenor Banjo is fingered the same as the Cello, which part is written in the *bass-clef.* These facts tend to indicate the reason for writing Banjo parts in the *alto* or *bass-clef.*

As it is equally difficult to write all that can be written for the Tenor Banjo in either the *treble, alto* or *bass-clef,* the *treble-cleff* is the most advisable to use, because it is more universally known. The only possible way to write for all registers of the Tenor Banjo is to utilize two different pitches—viz.: *actual pitch* and *octave pitch.*

Actual pitch means that the written note played on the Banjo sounds identically the same as the note played on the Piano.

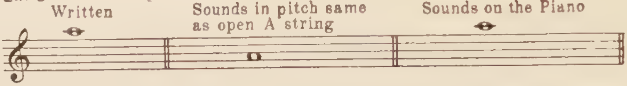
Ex. 2



This pitch is indicated by writing the word "Actual" above the part to be played in that pitch.

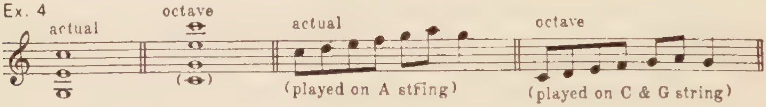
Octave pitch means that the written note, played on the Banjo, sounds an octave lower than the same note played on the Piano.

Ex. 3



This pitch is indicated by writing the word "Octave" above the part to be played in that pitch.

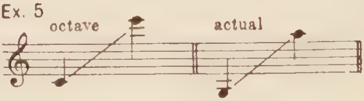
Ex. 4



In the first measure the C Chord is written in *actual pitch,* and in the second measure the same chord is written in *octave pitch.* Both of these chords sound the same on the instrument, the only difference being that the first measure shows a three-note chord, and the second measure a four-note chord. This illustrates the use of *octave pitch,* when it is necessary to write a four-note chord. All three-note chords should be written in *actual pitch,* which makes them easier to read, especially in the high register of the instrument. The third measure illustrates the use of *actual pitch* when writing Banjo solos in the high register. The fourth measure shows the use of *octave pitch* when writing Banjo solos for the *C* or *G* string.

The following example shows the practical writing range of both pitches.

Ex. 5

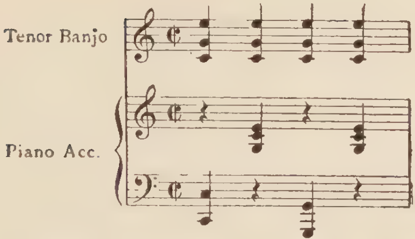


Rhythm

Fundamentally, the Tenor Banjo is a rhythm instrument. When applied to dance music, it is used to create a strict rhythm in the orchestra. The rhythms in all tempos, for the right hand of the Piano, as previously shown, also apply to the Banjo.

Although these two instruments are closely related in rhythm, it does not necessarily imply that they are to play identically the same—i.e., if in a Fox-trot, a straight accompaniment is being played on the Piano, the Banjo may play four beats to a measure.

Ex. 6



It is correct to write after-beats for the Banjo when such an effect is desired. A good player will improvise rhythms, using the written part merely as a guide.

Solo Instrument

The Banjo deserves much consideration as a solo instrument. When a Banjo solo is required, it is best to write only the melody and then instruct the player, by indicating over the notes the style of playing desired, such as *"single note variation"—"with chords,"* etc. If a special variation or harmonization is required, it is best to write such in every detail.

Chords

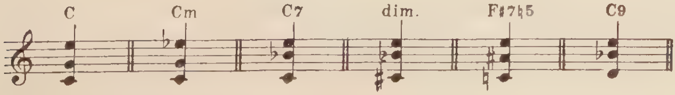
Chords are formed by placing the fingers of the left hand on the frets of the instrument. When three notes are to be played, three fingers are applied on three different strings; when four notes are to be played, four fingers are applied to four different strings. It is only possible to play one note of a chord on each string; therefore it is necessary to write chords in such a manner that two notes of the chord do not occur on the same string.

Naming of Chords

Placing the name of the chord over the notes is very practical. It is only necessary to thus place the name of the chord whenever a change of chord occurs.

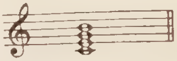
A *Major* Chord is indicated by writing merely the letter representing the chord. To indicate a *Minor* Chord, the letter *m* should be placed after the letter indicating the chord. To indicate a *7th* chord, the figure 7 should be placed after the letter indicating the chord. To indicate a *Diminished* Chord, only the word *dim* should be placed after the letter indicating the chord. To indicate an *Augmented* Chord, a (+) should be placed after the letter indicating the chord.

Ex. 7



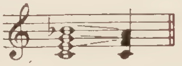
According to strict rules of Harmony, in the key of *C,* a 7th chord, based on C (*C, E, G, B*),

Ex 8



is a *Major 7th* chord of *C.* The *7th* chord of *C,* as applied to Banjo chords, represent *C, E, G, B♭,*

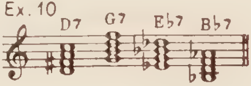
Ex 9



which is really the *dominant 7th* chord of *F,* and belongs to that key.

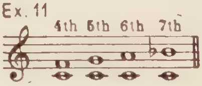
To simplify the reading of *7th* chords, this chord in Banjo music is named after the note upon which each individual *7th* Chord is constructed. The following shows several examples of *7th* Chords as applied to Banjo music.

Ex. 10



On pages 11 and 12 are shown a series of chords for the right hand of the Piano part—viz.: *Major, Minor, Augmented, Diminished, 7ths. 9ths,* and *altered chords.* All these chords can be played on the Banjo, but not as they are written for the Piano. Banjo chords are usually written in intervals no closer than a *4th,* and no further apart than a *7th.* In order to make this clear, it is necessary to show the following table of intervals.

Ex. 11



THREE NOTE BANJO CHORDS

When writing actual pitch chords, three notes are employed. The lowest C string note is omitted for the following reasons:

All Major, Minor and Augmented 5th chords consist of three different notes, and when these are played on the Banjo, the A string note is the same as the C string note, two octaves lower. Therefore it is unnecessary to write this note, which makes the chord easier to read. *Seventh, diminished 7th, ninth* and *altered* chords consist of four different notes and can be fully represented on the Banjo. When writing in the form of a three note chord, only three notes of the chord appear. The fourth note, which is missing, is added by the player, who in fingering four string chords, automatically adds the missing note. As a guide to the player, the name of each chord is written above the notes, so that the proper fingering for the complete chord may be readily found.

When writing a three note chord, it is necessary to avoid eliminating either a G or D string note. If only C, G and A strings are employed, it is impossible for the player to skip the D string when strumming across the strings, therefore three note chords should always be written for G, D and A strings.

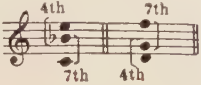
Constructing Chords

A Banjo Chord is constructed by adding one interval to another interval already formed.

There are several important rules of combining the intervals:

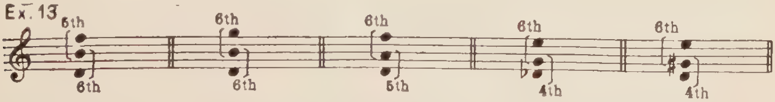
Rule No. 1—To an interval of a *7th,* only an interval of a *4th* can be added above or below that *7th.*

Ex. 12



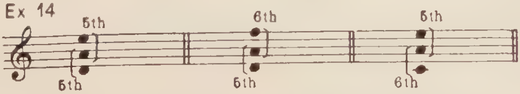
Rule No. 2—To an interval of a *6th,* any *5th* or *6th* can be added above or below that interval. A *4th* can be added when augmented a half-tone.

Ex. 13



Rule No. 3—To an interval of a *5th,* only a *5th* or *6th* can be added to that interval. The adding of the *5th* does not constitute a chord, it is only mentioned as possible to be played. In combining two *5ths,* neither one of these intervals should be diminished.

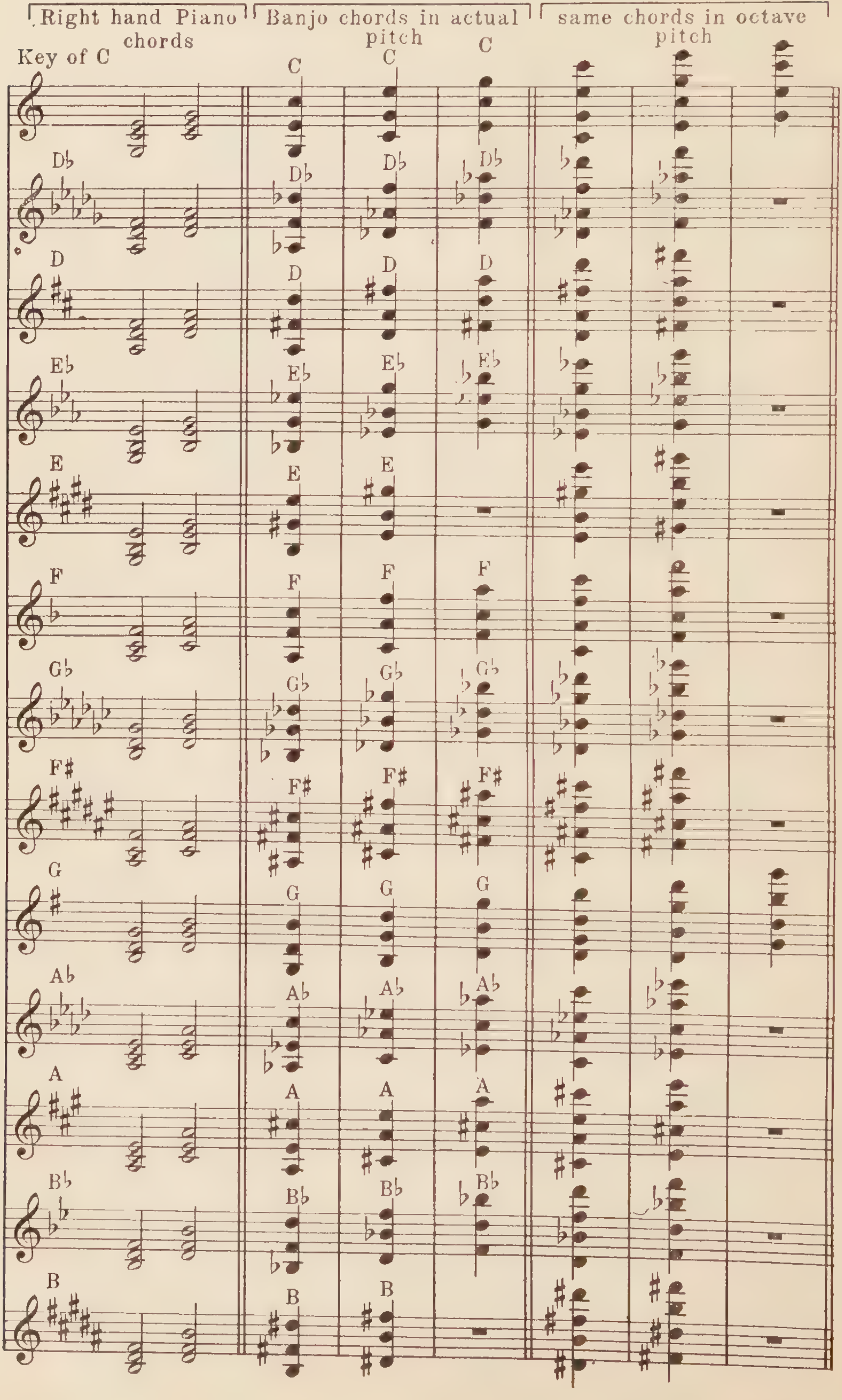
Ex 14



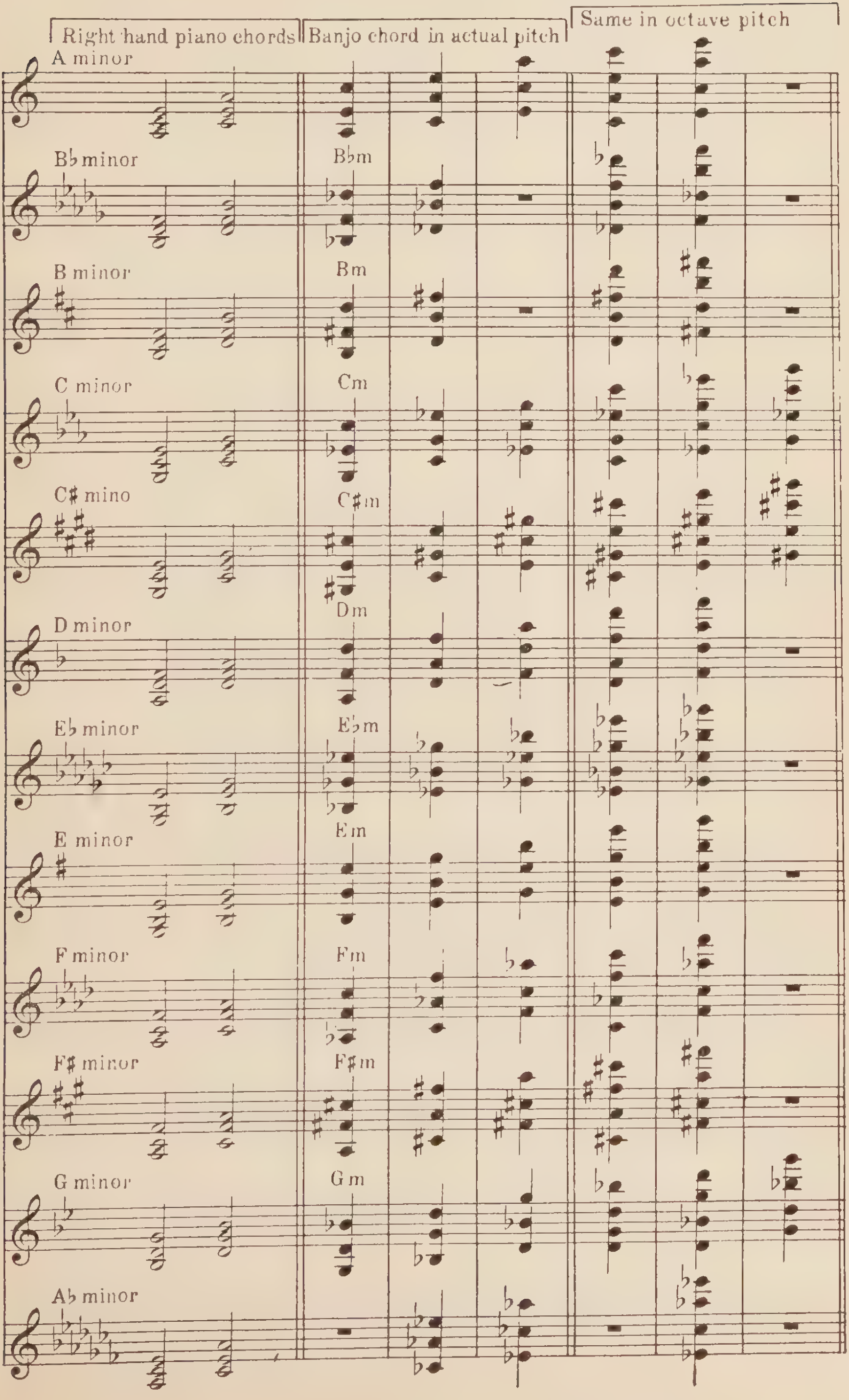
When constructing four note *octave pitch* Banjo chords, a *third* may be added below an already constructed three note chord. This applies only to one form of seventh chord and will be explained later.

A summary of all that has been taught in the foregoing paragraphs will be combined in examples hereafter shown. These examples show all Banjo Chords, in all keys, with all inversions, relative to their respective right-hand Piano Chords.

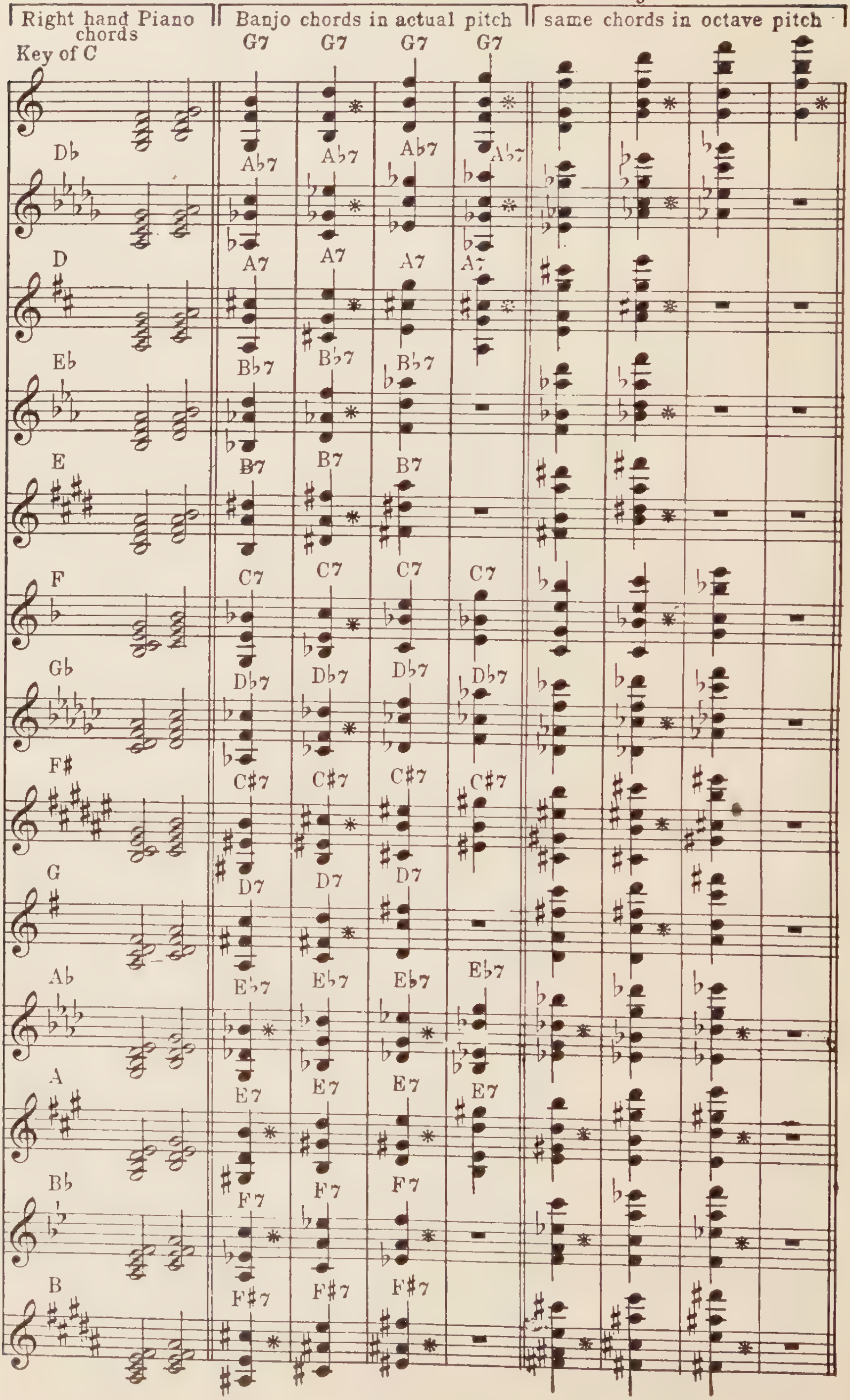
Ex. 15 MAJOR CHORDS FOR TENOR BANJO



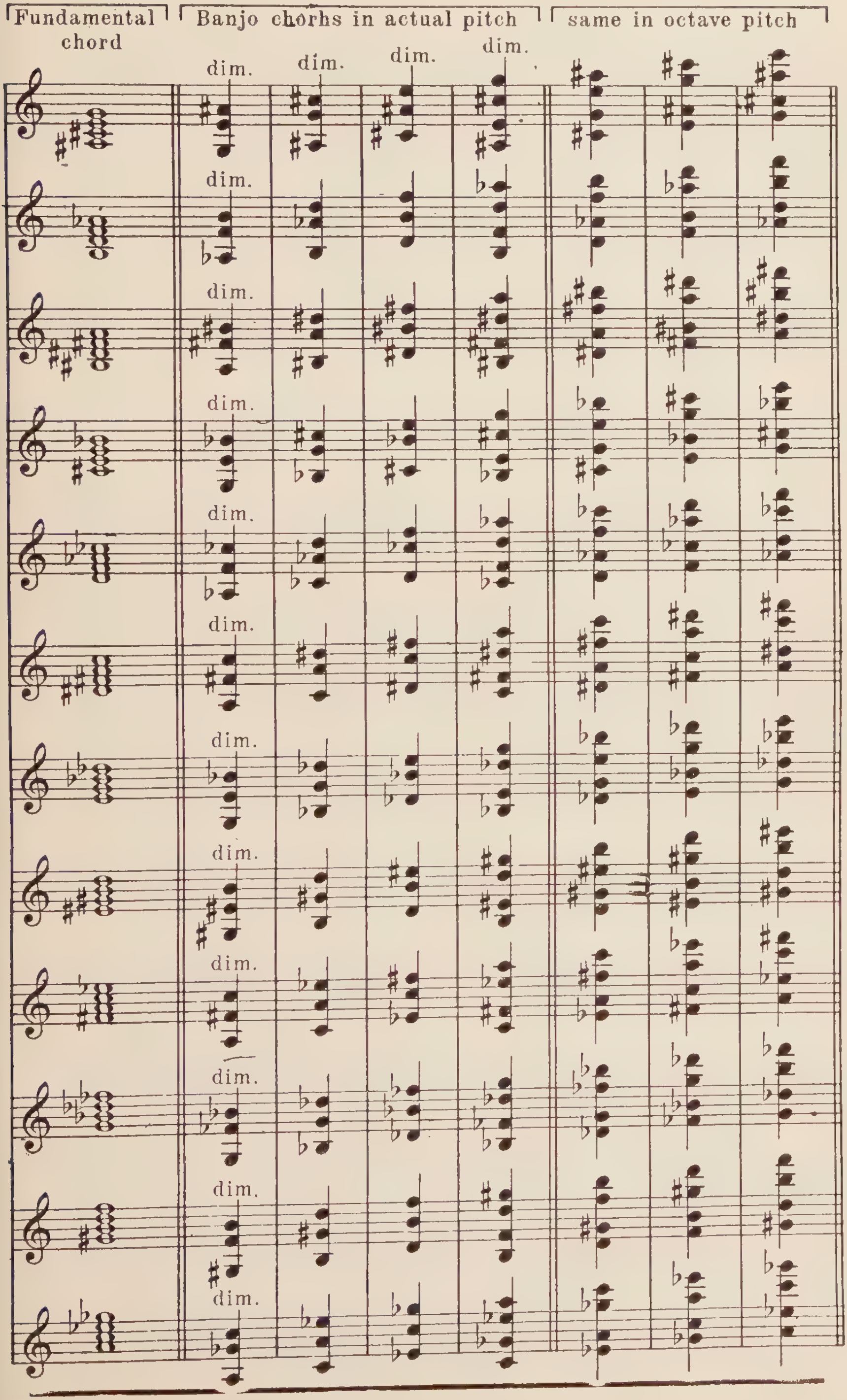
Ex. 16 RELATIVE MINOR CHORDS FOR TENOR BANJO



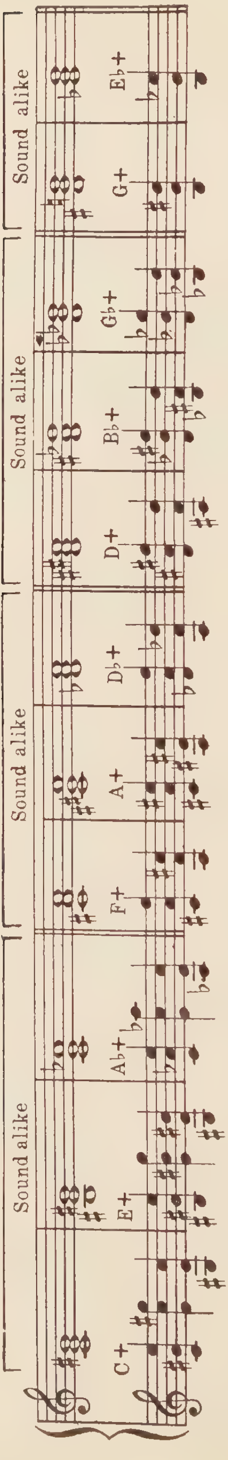
Ex. 17 DOMINANT 7th CHORDS FOR TENOR BANJO



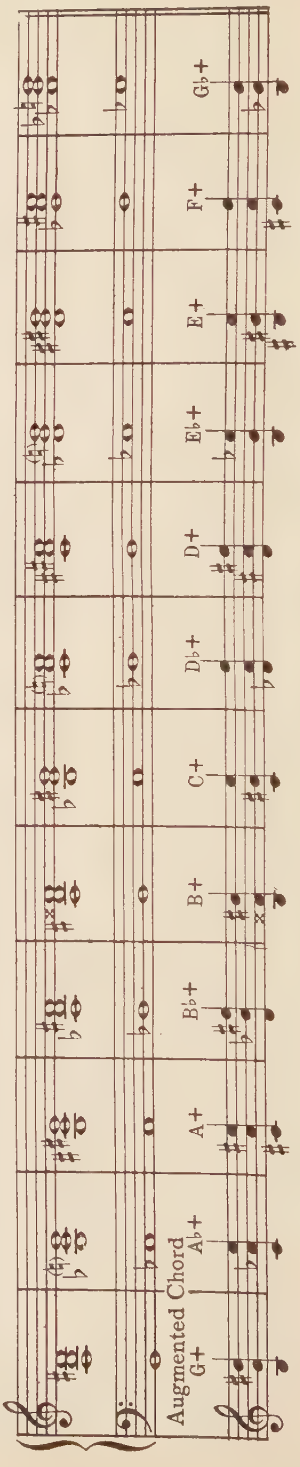
Ex. 18 DIMINISHED 7th TENOR BANJO CHORDS



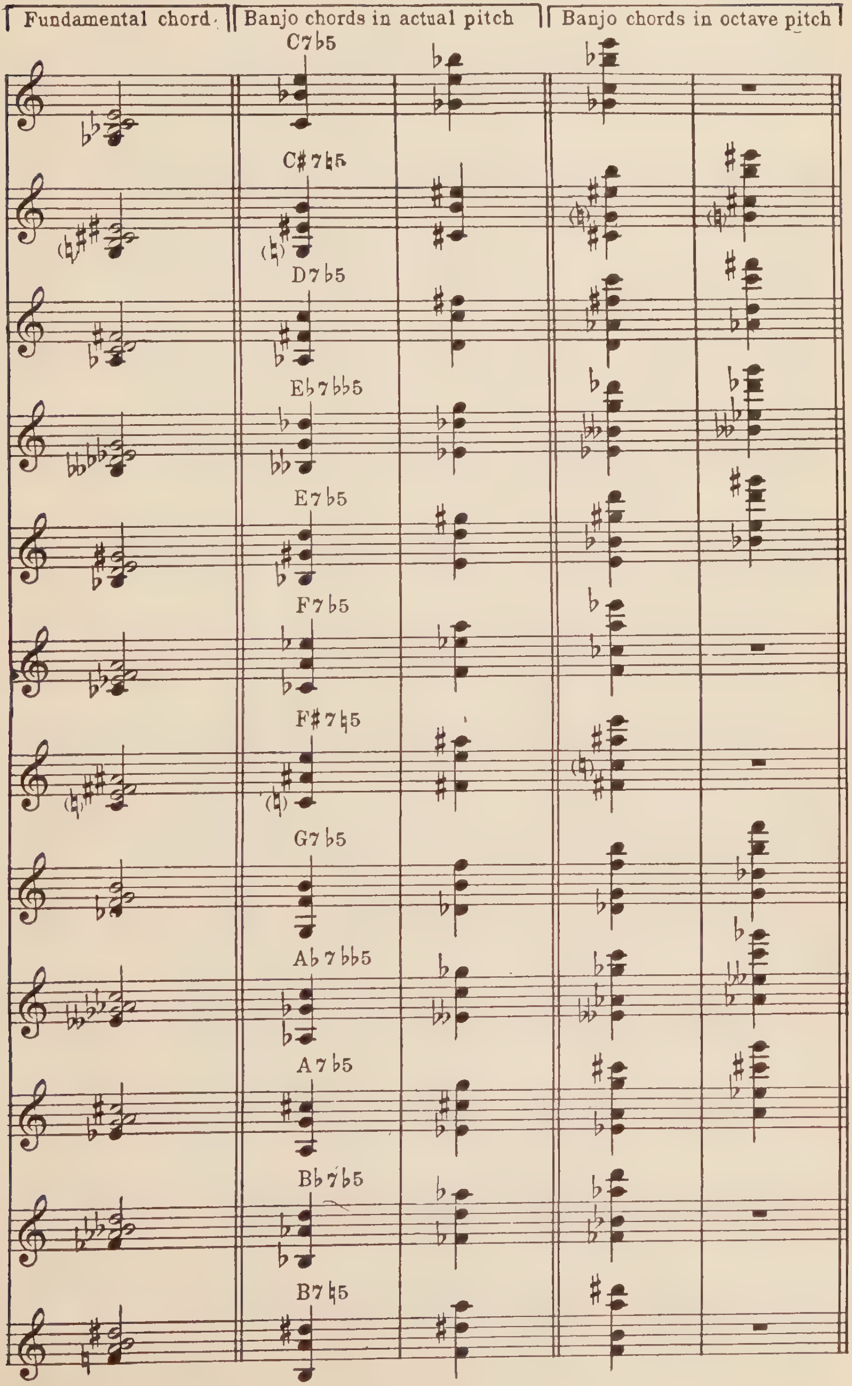
Ex. 19 Augmented Chords



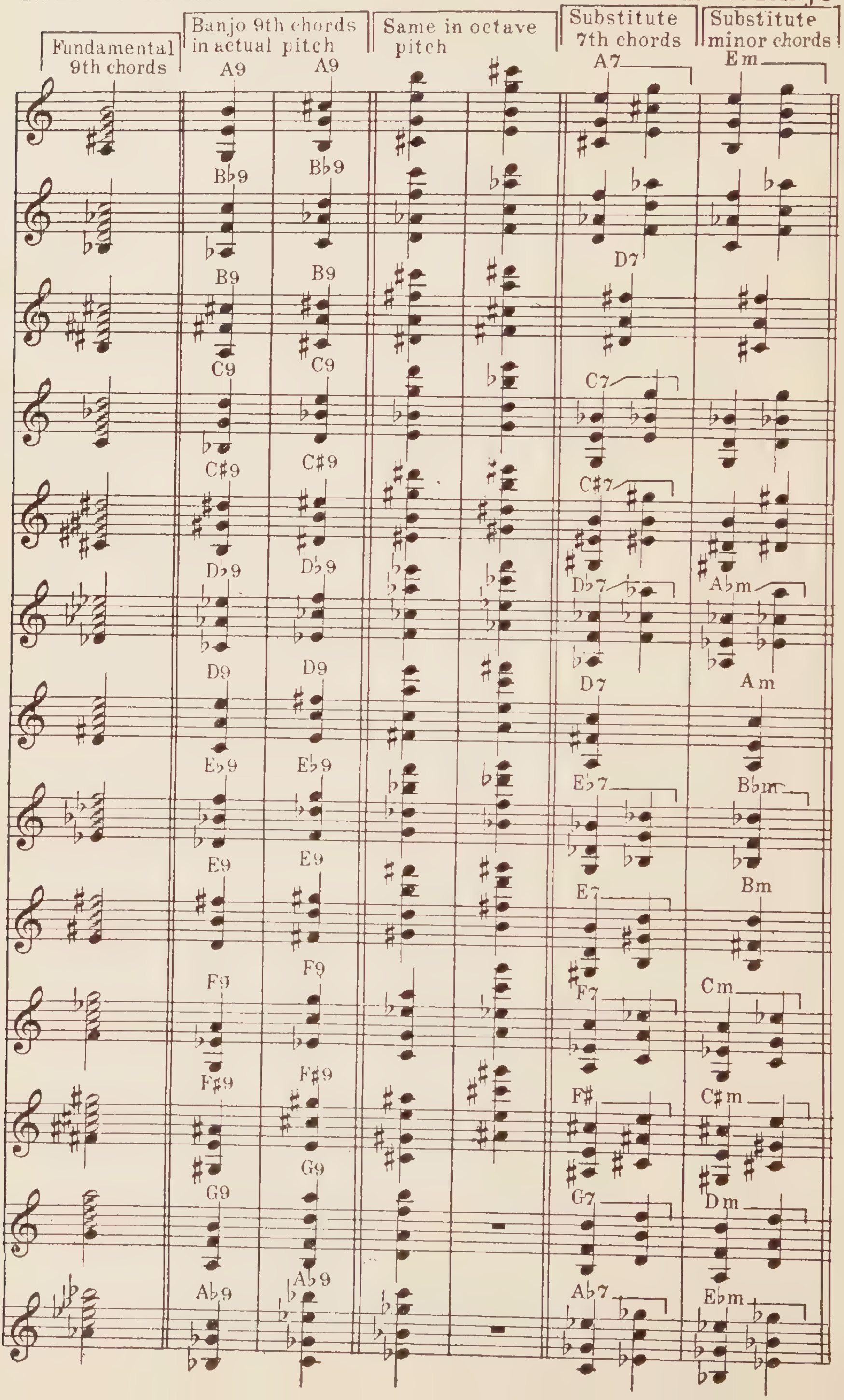
Ex. 20 Seventh Chords with Augmented fifths



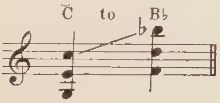
Ex. 21 SEVENTH CHORDS with lowered 5th as bass note



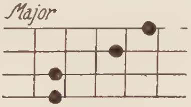
Ex. 22 NINTH CHORDS AND SUBSTITUTE CHORDS FOR TENOR BANJO

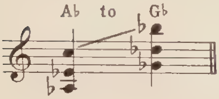


Ex. 15 shows all *major* chords in three inversions. In some keys the third inversion has been omitted, owing to the fact that it would appear on ledger lines far above the staff, and thus would be impractical to read. The reason for omitting the C string note, in a *major* chord has already been stated; however when writing *octave pitch* chords they may be added when not too far below the staff. For further enlightenment, the following examples show how each inversion of *major* chords is fingered on the instrument.

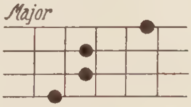


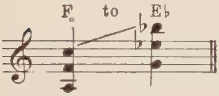
is fingered



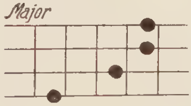


is fingered

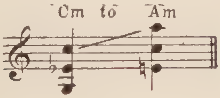




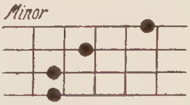
is fingered

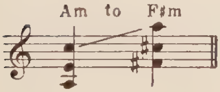


Ex. 16 shows the relative *minor* chords of all keys. What has been explained in conection with the *major* chords, also applies to the *minor* chords. The following examples show how the different inversions are fingered on the instrument.



is fingered





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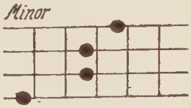
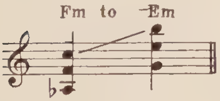
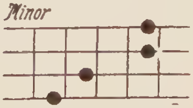
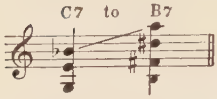




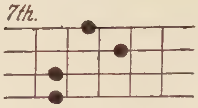
is fingered

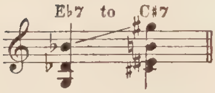


Ex. 17 shows all 7th chords relative to their respective keys. Note that in the key of C, the G7th is used, and in the key of F, the C7th is used. This further explains what has been said before in reference to the naming of the 7th chord. There are four different ways of fingering a 7th chord on the Tenor Banjo.

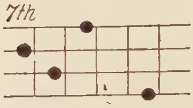


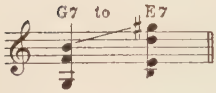
is fingered



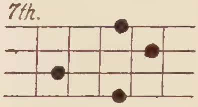


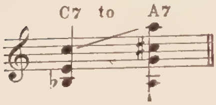
is fingered



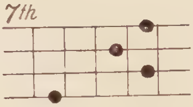


is fingered



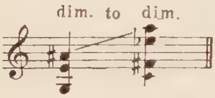


is fingered

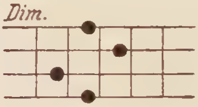


Of these, the chords indicated by a (*), as shown in Ex. 17, are not as easy to finger as these without a (*), therefore these inversions should be used with discretion.

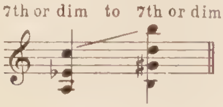
Ex. 18 shows the various *diminished* chords. In sound many of these are alike, but when writing *diminished* chords the key of the composition governs the notation. All *diminished* chords are fingered alike, as shown in the following example.



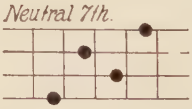
is fingered



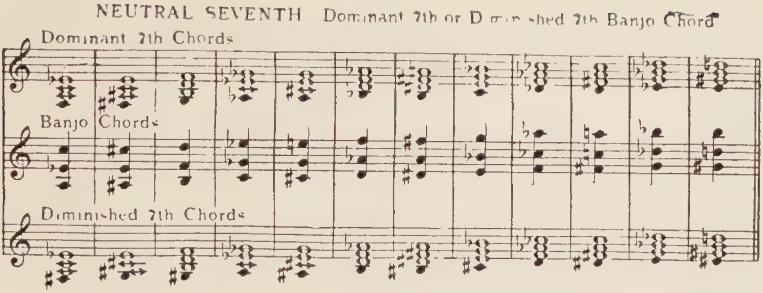
In connection with *7th* and *diminished 7th* chords, another chord, different from those already shown, must be dealt with. This chord is the *"neutral" 7th*. Like *major* and *minor*, this chord only consists of three notes. The C string note is doubled with the A string note, two octaves apart, and is fingered as follows:



is fingered

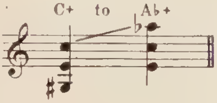


All *7th* chords, whether *dominant* or *diminished*, consist of four notes; the *neutral* chord of only three notes. For this reason the *neutral 7th* chord is flexible, and can be used either as a *dominant* or *diminished 7th* chord. The missing note is supplied by another instrument of the orchestra, preferably a bass instrument. When writing this chord it may be indicated either as a *7th* or *diminished* chord.

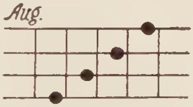


Example 19 shows various *augmented 5th* chords in four groups. The chords of each group are written in different notation, but sound alike. The last group shows only two chords. These four groups are the foundation of all *augmented 5th* chords.

All inversions of the *augmented 5th* chord are fingered alike, as shown in the following example.

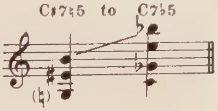


is fingered

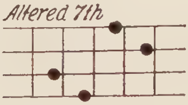


Ex. 20 shows a chromatic octave of *7th Chords,* with an *augmented 5th,* below which are written relative *augmented chords.*

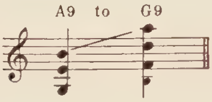
Ex. 21 shows *7th* chords with lowered *5th.* This means that the *5th* of the chord is lowered a semi-tone by a flat or natural. In some of the inversions of the *actual pitch* three note chords, the *5th* of the chord is missing, and is the same in notation as shown in Ex. 17. These are distinguished from one another by indicating the lowered *5th* in conjunction with the name of the chord. However, when writing four note *octave pitch* chords the full chord including the lowered *5th* is written. All inversions of this chord are fingered on the instrument as shown in the following example.



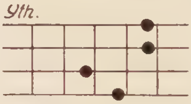
is fingered

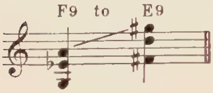


Ex. 22 shows all the different *9th* chords and substitute chords for the Tenor Banjo. This chord is not used as much as the others, owing to the fact that *dominant 7th* and *minor chords* act as a substitute for it. It is not incorrect to write 7th or *minor* chords in place of a *9th* chord, but to be thorough, the *9th* chord should be written as shown in the first two measures of Banjo chords in Ex. 22. Two inversions are all that are practical, but these are not sufficient to meet all requirements, therefore the substitute chords shown in the last two measures of Ex. 22 may be written; not in place of an actual *9th* chord, but when the playing position does not allow awkward skips. The two inversions of *9th* chords are fingered on the instrument as shown in the following examples.

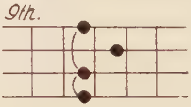


is fingered





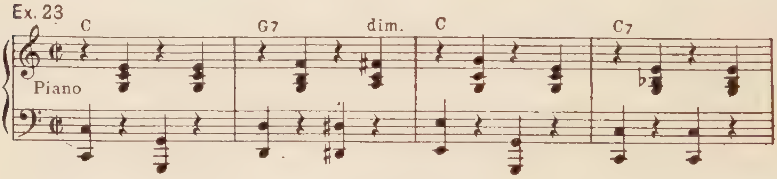
is fingered



WRITING

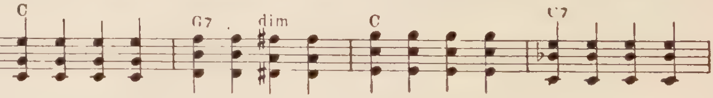
After the aforesaid has been thoroughly absorbed, the next thing to learn is how to construct a Banjo part. Before beginning to write the Banjo part the Piano accompaniment must first be written. As already stated, each right hand Piano chord has an equivalent Banjo chord. It is, therefore, necessary to first write the name of each chord over the Piano part. When a change of chord occurs, the new chord is indicated.

Ex. 23



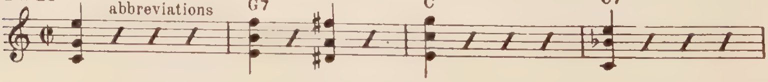
The next example shows the written Banjo part of Example 23.

Ex. 24



When a Banjo chord is to be repeated many times, it is not necessary to write the chord more than once to each measure. An abbreviation sign may be written in place of a repeated chord.

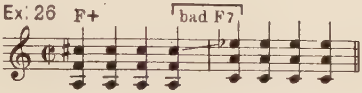
Ex. 25



Smooth Progression

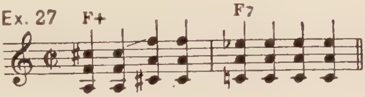
Awkward and unmusical skips from one chord to another should be avoided. This is done by carefully selecting the nearest upper note of the following chord—i.e., closest writing position. When an awkward skip cannot be avoided at the point of occurrence it may be eliminated by forethought. For instance, in the following example the two measures of Banjo chords one measure of *F* augmented chords, followed by a measure of *F 7th* chords.

Ex: 26



The progression from C♯ to E♭ is incorrect, and can be avoided by inverting the *F augmented* chord to a higher inversion, as shown in the following example:

Ex. 27

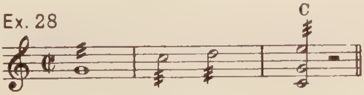


Although it is not necessary to write inversions of chords when they are being repeated many times, it is good form to write inversions in order to eliminate monotony.

Tremolo

The most commonly used effect is the *tremelo.* This effect can be played in solo form or in conjunction with rhythm. It is created by moving the stroke hand rapidly to and fro over the strings. *Tremolos* are usually written in conjunction with *one-quarter* notes, *whole* notes, or *one-half* notes; in single note or chord form.

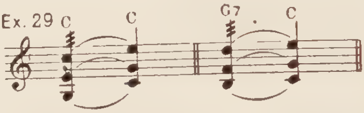
Ex. 28



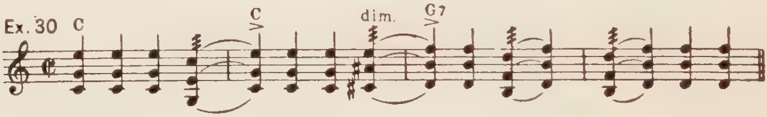
The *tremolo* is very effective when written in conjunction with a chord sustained by the entire orchestra.

GLISSANDO

The *glissando* is created on the Banjo by sliding the left hand from a low to a high position chord, at the same time creating a *tremolo* with the right hand. During a *glissando* it is possible to change from one harmonic structure to another, or to the same chord, in a higher position.

Ex. 29


The *glissando* is very effective, especially in rhythm playing, and tends to obviate the monotony of straight rhythm. A *glissando,* when begun on the fourth beat of a measure, and ended on the first beat of the following measure in accented manner, creates a definite "lift" in rhythm. Below are shown a few measures of rhythm, which include the *glissando.*

Ex. 30


HAWAIIAN EFFECTS

The Banjo can imitate two different Hawaiian instruments—viz., the Ukulele and Steel Guitar. The Ukulele is imitated by applying the mute to the bridge of the Banjo and strumming chords with a pick in Hawaiian rhythm.

The Steel Guitar effect is produced by applying the mute to the Banjo and playing the melody in *glissando* form. This is done by sliding the left-hand finger upward to each melody note and at the same time plucking the string with the pick once to each *glissando.*

What has been mentioned up to this point about the Tenor Banjo will be further developed in conjunction with other subjects.

CHAPTER IV

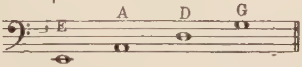
THE BASSES

The Bass of a dance arrangement is usually played by the Bass Violin, or *B*♭ Bass Tuba. The Bass-Saxophone is sometimes used, but for the present the Bass Violin and Tuba will be dealt with.

THE BASS VIOLIN

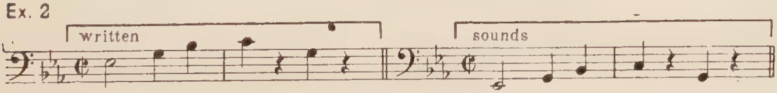
The Bass Violin is a four-stringed instrument, played with the bow (*arco*), or plucked with the fingers (*pizz*). The four strings are tuned: *E, A, D, G,* as shown herewith.

Example 1



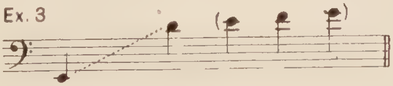
The part to be played by the Bass Violin is written in the *bass clef,* in the key of the composition, sounding an *octave* lower than written. For example:

Ex. 2



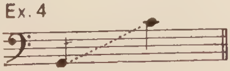
The writing register for the Bass Violin is from its lowest open string *E,* to far above the *staff.*

Ex. 3



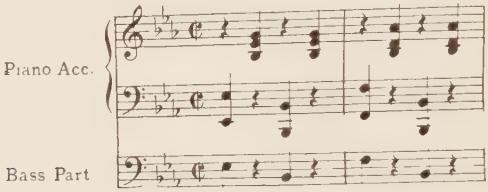
This register is not the usual register in which the Bass Violin part is written. For dance music, in which the Bass Violin plays the fundamental Bass rhythm, the writing for this instrument is restricted to a smaller register—i.e.:

Ex. 4



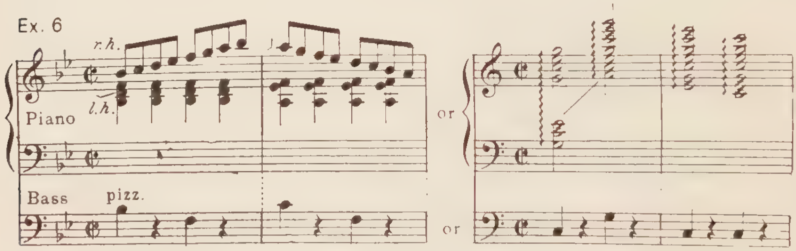
The Bass part of a dance arrangement is mostly a duplication of the Bass notes, written in the lower staff of the Piano part.

Ex. 5



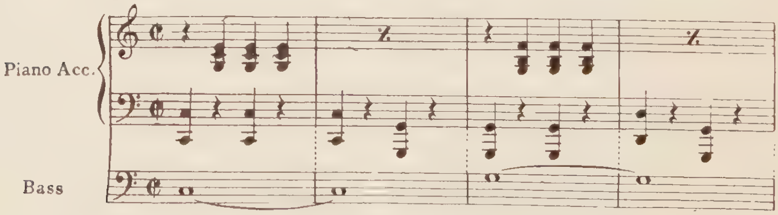
These two parts should not vary at any time during the playing of straight rhythm. There are a few exceptions to this rule. During the rendition of a Piano solo, in which the Pianist is obliged to discard the straight left-hand bass for the playing of other important passages, it is necessary that the Bass Violin part be written in the form of rhythmic bass.

Ex. 6



When an Organ-like effect is to be scored for the orchestra, it becomes necessary to sustain the Bass. This sustaining effect should not be written for the Piano, owing to the fact that rhythm would be absent. Therefore the Piano part must be written in strict rhythmic form, while the Bass Violin is sustained.

Ex. 7



The Bass Violin can produce the *tremolo* and *legato,* but *double-stops* are very impractical, and are never written for dance music. For this reason it is not necessary to mention possible and impossible *double-*

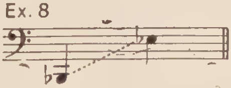
stops for the Bass Violin. *Pizzicato* for the Bass Violin has more precision than *arco;* this should be remembered when making an arrangement of a very rhythmic composition.

The Bass Tuba

The Bass Tuba is a brass instrument, and certain types are known as "Sousaphones." The Tuba is more often used than the Bass-Violin in the modern dance orchestra.

The playing register of the Tuba depends upon the size of the instrument. Therefore, it is best to show only the practical writing register for this instrument. This register applies to all Tubas.

Ex. 8



The part to be played by the Tuba is written in the *bass-clef,* and also in the key of the composition, but does *not* sound an octave lower than written. The Tuba sounds in the *same* pitch in which it is written.

All that has been said in regard to writing for the Bass-Violin also applies to the Bass Tuba, with the exception of *pizzicato* and the *tremolo* which effects cannot be produced on the Tuba. A bass solo is more effective when played on a Tuba than when played on a Bass Violin.

In the course of further explanations and examples, many unusual and different ways of writing for the Basses will be given.

CHAPTER V.

THE SAXOPHONES

The Saxophone individualizes the American dance orchestra. It is a brass-reed instrument. Its tone quality is similar to the French Horn and Clarinet combined. The Saxophone family, in a dance orchestra, consists of eight (8) sizes. Each size has its respective playing range, and regardless of size or pitch, all Saxophone parts are written in the treble clef. They are as follows:

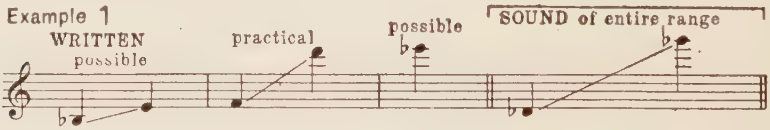
- E♭ Sopranino
- C Soprano
- B♭ Soprano
- E♭ Alto
- B♭ Tenor
- C Melody
- E♭ Baritone
- B♭ Bass

In this chapter each of the above types of Saxophones will be dealt with individually.

E♭ SOPRANINO.

The E♭ Sopranino is a straight shaped instrument, and is the smallest of the family. Compared to the others, it is the highest in pitch, and being an E♭ instrument, it is a transposing instrument. When a C is to be played an A is written. Its playing range is shown in the following example.

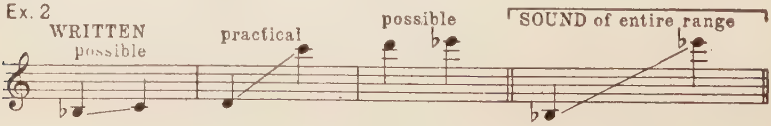
Example 1



C SOPRANO.

In size, the C Soprano Saxophone is larger than the E♭ Sopranino. This instrument also sounds in a high register, and being a C instrument, its part is written in the key of the composition. To sound C, a C is written. Its practical playing range is shown below.

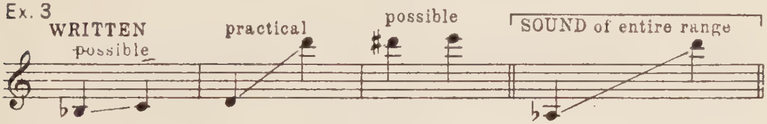
Ex. 2



B♭ SOPRANO.

The B♭ Soprano, in size and type is the same as the C Soprano and sounds in the same register. The only difference is in pitch. When a C is to be played, a D is written. Its playing range is as follows:

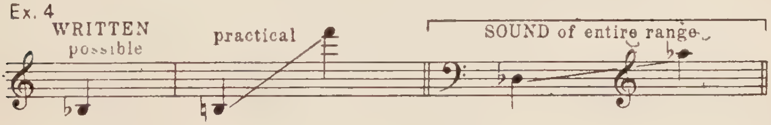
Ex. 3



E♭ ALTO.

The E♭ Alto is a curved instrument, and the medium size of the family. It is the one most popular, and the one most used. When three Saxophones are employed in an orchestra, two of these are usually Altos. Being an E♭ instrument, its part is the same in notation as the E♭ Sopranino, but in playing range, it sounds an octave lower, as shown in the following example:

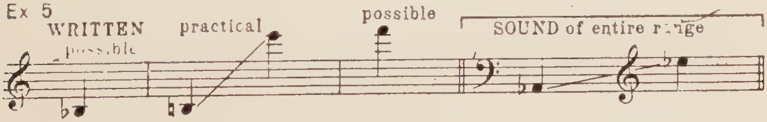
Ex. 4



B♭ TENOR.

The B♭ Tenor is a curved instrument, and in size, is larger than the E♭ Alto. It is second in importance in the family. When two Saxophones are employed in an orchestra, this instrument is usually present. Being a B♭ instrument, its part is the same in notation as the B♭ Soprano, but in playing range, it sounds an octave lower, as shown in the following example:

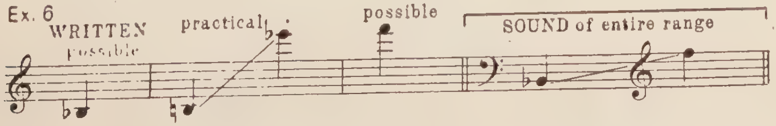
Ex 5



C MELODY.

The C Melody Saxophone is a curved instrument, and in size, similar to the E♭ Alto, but in pitch similar to the B♭ Tenor. Being a C instrument, its part is written in the key of the composition, but sounds an octave lower than written.

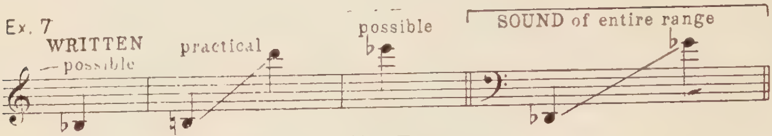
Ex. 6



E♭ BARITONE.

The E♭ Baritone is also a curved instrument, but in size, it is a great deal larger than the B♭ Tenor. Being an E♭ instrument, its part is the same in notation as the E♭ Alto, but in playing range, it sounds an octave lower.

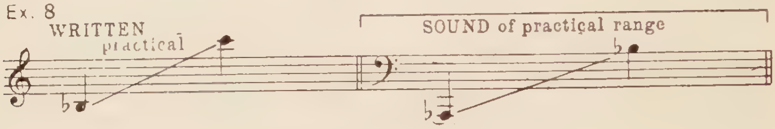
Ex. 7



B♭ BASS.

The B♭ Bass Saxophone is a curved instrument, and the largest size used in the dance orchestra. In pitch it is very deep, and, therefore, is often used in place of a Bass Violin or Tuba. Being a B♭ instrument, its part is the same in notation as the B♭ Tenor, but in pitch, sounds an octave lower.

Ex. 8



EMPLOYMENT.

The E♭ Alto Saxophone plays a leading part in the dance orchestra. In nearly all Saxophone duets, or trios, the E♭ Alto is assigned to the melody, and during ensemble playing, to the part of next importance. The B♭ Tenor Saxophone, when not employed as a solo instrument, usually assists the Alto in duet form. When a third Saxophone is employed, preferably an E♭ Alto, then both the 2nd Alto and Tenor are scored in such a manner as to assist the 1st Alto Saxophone in emphasizing the harmony, etc.

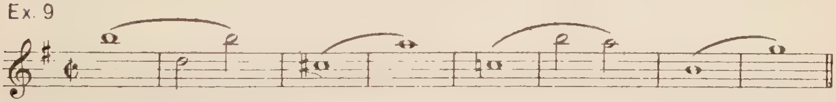
The Saxophones are adaptable to legato, staccato and all other forms of phrasing. The staccato is particularly effective in rhythmic figurations; the legato is effective in melodies of a smooth nature. An effect very characteristic and individual is what is commonly called "slap-tongue." This is an exaggerated form of staccato.

The Alto, Tenor and Soprano Saxophones are adaptable to rapid execution, and may be assigned to variations, and rhythmic figurations in solo, duet or trio form. Grace notes, trills or shakes are possible.

PRACTICAL WRITING.

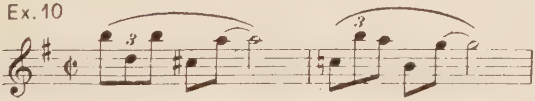
When writing Saxophone parts, it is important to preserve simplicity of execution. A musical phrase, though cleverly conceived, will often be distorted by the player if he is forced to manipulate a series of awkward fingerings. This refers chiefly to variations or figurations, in which many eighth notes or eighth triplets are employed. A good player can overcome difficulties in fingering by having a knowledge of trick fingering. Only when an intimate knowledge of the player's capability is known, is it advisable to rely on this. Even so, there are many mechanical impossibilities attached to Saxophone playing, which even a good player cannot overcome. This refers mostly to awkward skips. There is no difficulty in rapidly skipping from a low note to a high note, especially octaves, but downward skips, in intervals of 6th, 7ths, octaves or more are rather awkward. If, in conjunction with such skips, legato phrasing is required, the player is forced to loosen the pressure on the mouthpiece suddenly and the phrase will be unavoidably marred. When downward skips in large intervals are part of a melody, which moves in whole or half notes, this does not occur, because the player has ample time to finger and humor the tones.

Ex. 9



If the notation of the above example were written in eighth notes, or eighth triplets, in the form of a legato figuration, it would be very awkward to play, and naturally would not produce the desired effect.

Ex. 10



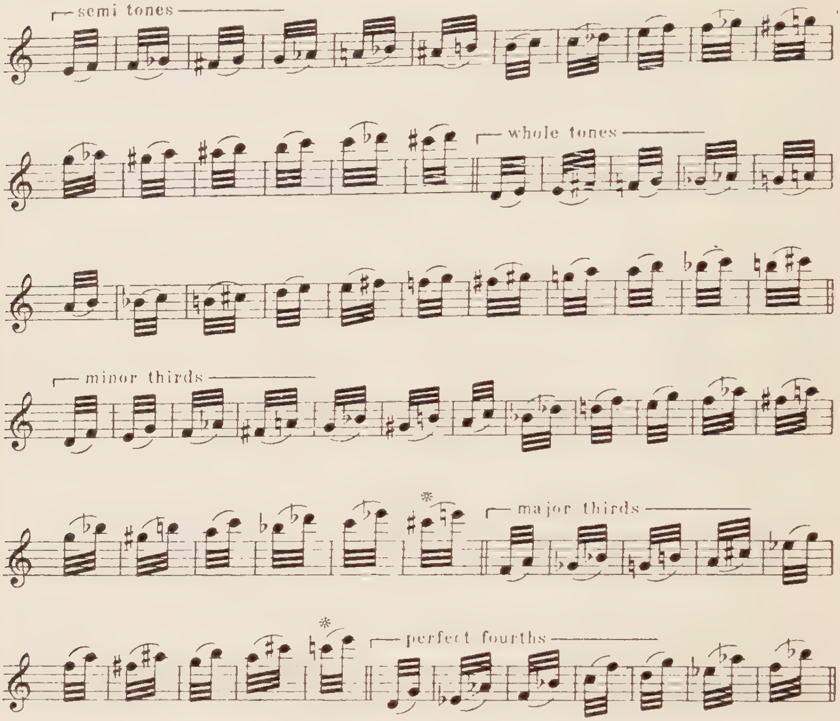
The above shown phrase would be equally difficult to play if the legato phrasing were not required.

Shakes and Trills.

Though shakes and trills may be played, many are impractical and some are impossible. Shakes and trills are very effective when judicially used. If they are impractical to play, the effect is lost. For this reason only those shakes and trills which are practical should be written. All Saxophones are practically fingered alike. The written note is fingered exactly the same on all Saxophones. This simplifies the explanation of practical and impractical trills or shakes, and those shown in the following example apply to all Saxophones.

Ex. 11

MOST PRACTICAL SHAKES AND TRILLS ON ALL SAXOPHONES



* Can not be played on the E♭ Baritone

The above example shows trills and shakes ranging from an interval of a semi-tone to an interval of a perfect 4th. These are the most practical to write, and all that are necessary to show by examples. All those omitted are either impractical or impossible. Shakes, in intervals of more than a 4th, should never be written. Further instructions on how to write for the Saxophones are resumed in Chapter 17, "The Saxophone Unit."

CHAPTER VI

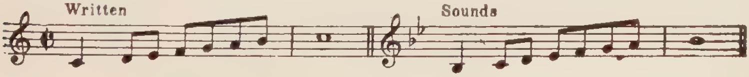
THE TRUMPET

The Trumpet is a Brass instrument, and when played "natural" its tone is bright, clear and penetrating. Trumpets are pitched in several keys—viz.: *C, B♭, D, F,* and *A.* For modern orchestral work the *B♭* and the *A* Trumpets are generally employed. For modern dance music the *B♭ Trumpet* is preferred. So little is written for the *A* Trumpet that this instrument is almost obsolete.

NOTATION

The *B♭* Trumpet is pitched in such a way that the written part, when played on the instrument, sounds one full tone lower.

Example 1

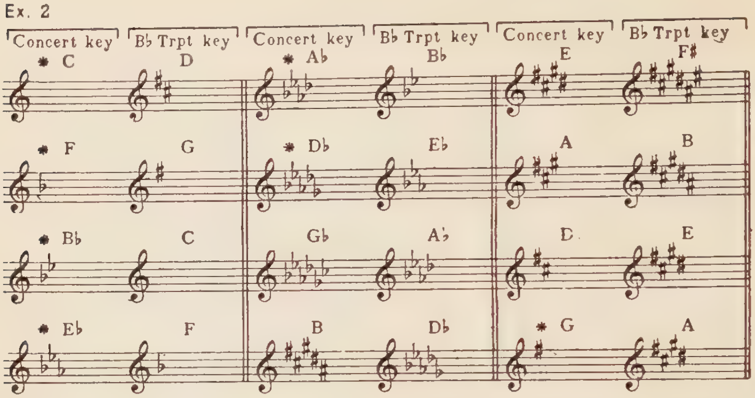


When an actual B♭ is to be sounded on a B♭ Trumpet, a C is written. Accordingly, the B♭ Trumpet part must be written a full tone higher than the Violin part—i.e., the key of the composition. In other words, a melody to sound in the key of *C,* must be written in the key of *D* for the B♭ Trumpet.

In selecting keys for an arrangement, the key in which the *B♭* Trumpet part is to be written must be considered. Writing for the *B♭* Trumpet in such keys as *E* (4 sharps), or *B* (5 sharps), should be avoided.

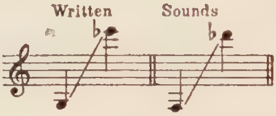
The following example shows a table of all keys. Directly following each key signature is shown the key in which the *B♭* Trumpet part is written. All keys indicated by (*) are those which are mostly used in making a dance arrangement.

Ex. 2



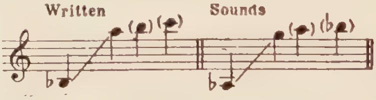
The playing range of the *B♭* Trumpet depends on the ability of the player. An accomplished Trumpet player can play as low as concert *F* and as high as *D♭*.

Ex. 3



The above shown range is not practical to write. The following example shows the writing range to be used in writing the usual Trumpet part:

Ex. 4



EFFECTS

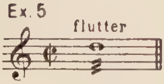
The Trumpet, being a valve instrument, is adaptable to rapid execution of tones as well as for sustaining tones. It is primarily a soprano solo instrument.

By inserting different kinds of mutes into the bell of the Trumpet, the tone color is changed considerably. This is a valuable asset to be considered when arranging for the orchestra. This will be further explained later.

The Trumpet can produce the *staccato* and *legato* similar to the Violin, the only difference being that on the Violin these phrasings are produced by the bow; whereas, on the Trumpet, they are produced by the lips.

The *tremolo,* which up to this time has been restricted to string instruments, may be produced by an equivalent known as "flutter-tongue." The "flutter-tongue" is only an imitation of a tremolo, and therefore should not be used as a substitute. This effect is usually confined to eccentric playing.

Ex. 5



In the modern dance orchestra, one or two Trumpets are usually employed. Scoring for the Trumpet is explained and illustrated in Chapter XVIII; "The Brass Unit."

CHAPTER VII

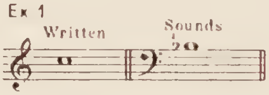
THE TROMBONE

The Trombone is a Brass instrument, and is considered the bass of the Trumpet family. There are four sizes of Trombones, viz., alto, tenor, bass and contra-bass; of these the tenor Trombone is used in the dance orchestra. There are also two types of tenor Trombones, viz., Slide-Trombone and Valve-Trombone; of these two, the Slide-Trombone is generally used, and although it is more difficult to play, it is preferred to the Valve-Trombone because its tone is richer.

NOTATION

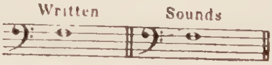
The Trombone is a B♭ instrument, and can be written for in either *treble, tenor* or *bass-clef.* When the Trombone part is written in the treble-clef, the same notation applies to the Trombone as to the B♭ Trumpet, i. e., when a *B*♭ is to be sounded, a *C* is written, an octave and one tone higher.

Ex 1



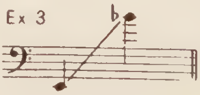
In modern dance music, the *treble* and *tenor-clef* is never used for the Trombone. Because the Trombone part is written in the *Bass-clef,* it becomes a *C* instrument. Therefore, the part is written exactly as it is to sound.

Ex 2



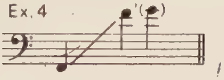
The writing range for the Trombone, in the bass-clef, is from low *E* natural, to high *B*♭.

Ex 3



In writing for the average Trombonist, the following range is more practical.

Ex. 4



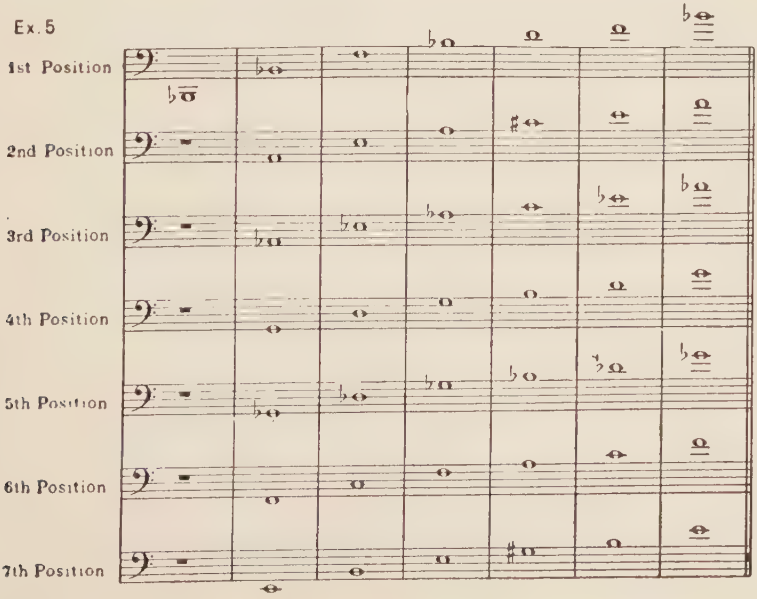
POSITIONS

Fast execution on the Trombone is possible, but not practical. However, if a thorough knowledge of all the positions on the Trombone has been acquired, such knowledge will aid in assigning rapid passages to the Trombone which lay well on the instrument and are therefor easy to play.

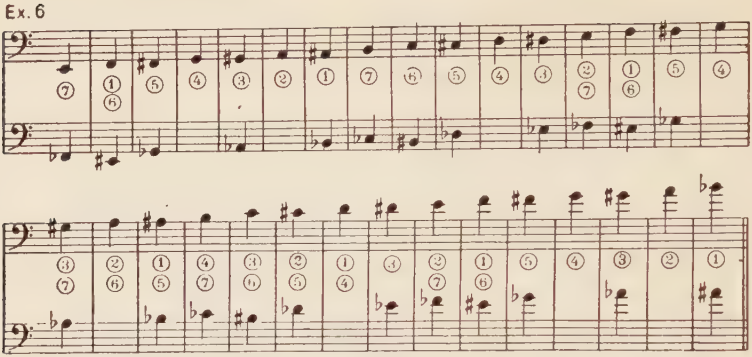
The slide on the Trombone has *seven* positions, each representing a semi-tone. In the *first* position, the position of the slide is closest to the mouth-piece, and in the *seventh* position, the position of the slide is furthest away. More than one tone can be produced in each position; these in turn are created by the "embouchure," i. e., pressure of the mouth-piece on the lips.

The following chart shows the *seven* positions, and the tones that can be produced in each. Directly following this chart, is another example showing the chromatic scale, in which the slide position is indicated over each note. It will be noticed that some tones can be produced in more than one position.

Ex. 5

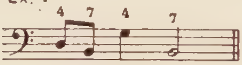


Ex. 6



When writing rapid passages, it is necessary to avoid the *seventh* position. The following example shows a succession of eighth notes, in which the player must change from the *fourth* to the seventh position.

Ex. 7

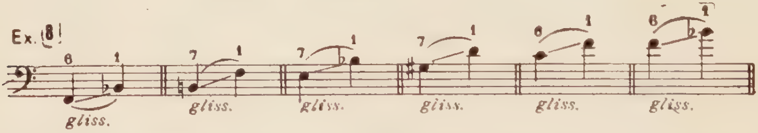


The low *B*♮ should be written only when unavoidable.

Glissando or Slide

The *glissando* is produced on the Trombone by sliding from a low position to a high position, without creating any definite intermediate intervals. In writing a *glissando,* the notation should be such, that it is possible to slide from one tone to another, unbroken. The following is an example showing all possible *glissandos.*

Ex. 8

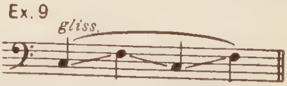


It is not necessary to write the full range of the *glissandos* shown above. A *glissando* may begin with any note between the two extreme positions of that respective *glissando.*

A *glissando* is indicated by a line from one note to another, adding a *slur,* and writing the word *"gliss"* above or below the notes, as in the examples quoted.

The continuous up and down *glissando,* is written in the following manner:

Ex. 9



Although a bass instrument, the Trombone is not necessarily scored as one. Solos and counter-melodies are very effective.

In a later chapter, which deals with "Brass Units," further information about scoring for the Trombone will be given.

CHAPTER VIII

MUTES

A mute is a contrivance for subduing the tones of instruments. For the Violin, the mute is a little piece of wood, metal, or ivory, which can be placed over the bridge. This type of mute can also be applied to the Tenor Banjo.

For the Trumpet and Trombone, the mute is a pear-shaped pad, made of leather, fibre, wood or metal. This mute the player inserts in the bell of the instrument when he wishes to subdue the tone.

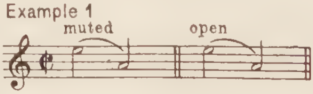
The difference of tone color between a metal mute, and a fibre, leather or wooden mute, is that the metal mute produces a more piercing tone. The metal mute is preferred for the Brass in the dance orchestra, because of its durability.

A mute effect can be produced either on the Trumpet or on the Trombone. The only difference is, that the mute for the Trombone is larger than the one for the Trumpet.

The mute is usually applied to the Brass when a contrast in tone-color to that produced by the Saxophones, or a very sharp Brass effect is desired.

Muted Trumpet solos and duets are very effective, whereas, Trombone solos are more effective when played open (without mute). When a mute is to be applied to the instrument, it is necessary to indicate "Muted" above the notes, and when the mute is to be removed, it is necessary to write "Open" above the notes.

Example 1



It is also necessary to allow ample time for applying and removing the mute.

The type of mute described above is the "Regular" mute. However, there are other types of mutes and unusual ways of producing mute effects.

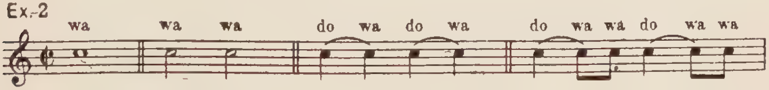
WA-WA MUTE

The "Wa-Wa" mute is so constructed that two distinctly different tone colors may be produced. This mute has an opening through the centre, which allows part of the wind pressure to escape. When the left hand is placed over this opening the tone is very much subdued, and when the hand is removed the tone is somewhat stronger. When the player is to entirely close this mute, it is indicated by writing the word "Do" over the note; and when the player is required to remove the left hand from the opening it is indicated by writing the word "Wa" over the note.

These two methods of playing with the "Wa-Wa" mute may be employed in many ways. They may be played in conjunction with a sustained note. When this effect is desired, it is necessary to write the notes in such manner that the rhythmic value of the "Do-Wa" is understood.

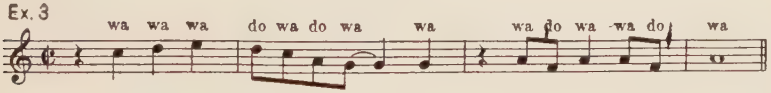
The following example shows a whole note to which various "Do-Wa" rhythms are added.

Ex. 2



The above example illustrates how this effect is applied to a single tone. The following example shows how this effect may be applied to a melody.

Ex. 3



The "Wa-Wa" mute can also be used for quiet solos in which the player does not apply the left hand to the mute. When the "Wa-Wa" mute is to be used it is indicated by the words "Wa-Wa Mute," and when such muting applies to a style of solo as aforesaid, it is only necessary to omit the words "Do-Wa" from above the notes.

HALF MUTE

When the regular mute is held partly into the bell of the Trumpet or Trombone, it creates a half-muted effect.

HAT MUTE

The Hat Mute is a "home made" contrivance which consists of an ordinary derby hat, through which a hole of about 1¼ inches is cut. This hole is necessary so that the pitch of the Trumpet or Trombone is not affected.

When the hat is placed over the bell of the instrument, it produces an open muffled tone similar to that of a French Horn. This form of muting is indicated by the words "in hat" above the notes.

It is also possible to place the hat over an already muted Trumpet or Trombone. This produces a very subdued tone and is indicated by the words "mute and hat."

Megaphone

When an open Trumpet or Trombone is played through a megaphone it produces a very deep, round tone. This is a good effect, especially for solos. It is indicated by writing the word "meg." above the notes.

Kazoo Mute

A Kazoo Mute is made of fibre, to which is attached an ordinary Kazoo. This produces a very peculiar subdued tone, particularly suitable in Oriental effects, as a substitute for Oboe.

Glass Effect

This effect is another form of muting, which creates a tone-color strictly confined to the Trumpet. It is produced by placing a thin glass closely to the bell of an already muted Trumpet.

When any kind of mute or color changing device is to be removed from the bell of the instrument, the word "natural" or "open" should always be written above the notes.

A later chapter, which deals with "Color Relations," will further explain the value of the various mutes.

Chapter IX

THE DRUMS

Drums are the most important rhythmic instruments in the dance orchestra. Different groups of instruments are played by a Drummer.

The Rhythmic Group, which has no musical pitch, consists of:

- Bass-Drum
- Snare-Drum
- Tom-Tom

The Cymbal or Color Group, which consists of:

- Crash Cymbal
- Chinese Gong
- Small Cymbal (attached to Bass Drum foot-pedal)
- Triangle.

The Melodic Group, which consists of:

- Bells
- Chimes
- Vibraphone
- Xylophone
- Marimba
- Tympany

The Trap Group, of which the most important are:

- Wire Brush
- Wood Block
- Slapstick
- Cow Moo
- Dog Bark
- Tambourine
- Duck Quack
- Wind Whistle
- Siren
- Baby Cry
- Cat Call
- Castanets

There are many other Traps, too numerous to mention.

Writing

The Drum part is written on one *staff,* in the *bass-clef* and without key signature. The *treble-clef* is written when an instrument of the Melodic group is to be played, and then with a key signature.

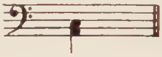
The Bass Drum

The Bass-Drum can be played by a foot-beater, or by a hand-beater. In the modern dance orchestra, where one Drummer is employed, the foot-beater is used.

The small Cymbal is attached to the Bass-Drum, and a small metal-beater is attached to the foot-beater, which strikes the small Cymbal simultaneously with the Bass Drum. This small Cymbal-beater can be quickly switched off at any time during the playing, so that only the

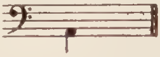
Bass-Drum is heard. These two different ways of playing on the Bass-Drum are indicated by writing on the *first* and *second spaces* of the *staff*. When both Drum and Cymbal are to be played, two notes are written, with stem down.

Example 1



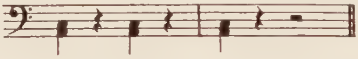
When only the Bass-Drum is to be played, one note is written in the *first space,* stem down.

Ex. 2



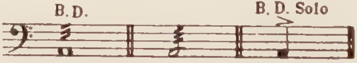
The note of longest duration to be written for the Bass-Drum is a *quarter note.* The open beats of the measure are filled out with rests.

Ex. 3



The *tremolo,* or *roll,* can be played on the Bass Drum. This is done with the drumsticks. The Bass-Drum can also be struck by the drumstick for a "Solo" beat.

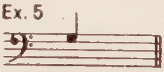
Ex. 4



THE SNARE DRUM

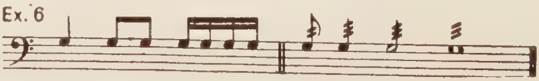
Taps and *rolls,* may be produced on the Snare Drum and these are written in the *fourth space* of the *staff.*

Ex. 5



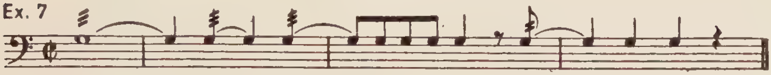
Taps are associated with *sixteenth, eighth* and *quarter notes.* The *roll* can be associated with any short or prolonged note.

Ex. 6



When writing a *roll,* it is customary to end that roll with a *tap.* This is done by writing a *quarter,* or *eighth* note, and bridging that note with the *roll* note by a *tie.*

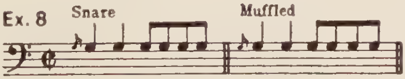
Ex. 7



The Snare-Drum can produce two different effects—viz.: "With Snares," or "Without Snares." When played "With Snares," this Drum produces a sharp, snappy sound. When played "Without Snares," it produces a muffled sound.

The writer must indicate these two different effects over the part. When a snare effect is desired, the word "Snare" is written above the music. When the snares are to be removed, the word "Muffled" should be written above the music.

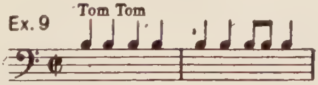
Ex. 8



The Tom-Tom

This Drum is struck with the Drumstick and is used in Indian and Oriental effects. The notes representing the Tom-Tom can be written as shown below.

Ex. 9

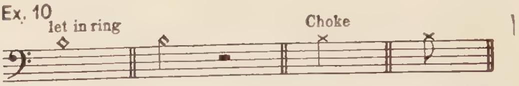


The Crash Cymbal

The Crash Cymbal is of the large type, which is attached to the upper part of the Bass-Drum. It is struck with either a drumstick or hand-beater. It can be struck and let ring, or struck and quickly stopped with the hand.

When a prolonged Crash Cymbal is to be played, the words "let it sound" should be written above the notes. When a short Cymbal Crash is to be played, the word "choked" should be written above the notes. Prolonged Cymbal beats are usually written in the form of a square *whole-note,* or square *half-note.* A short Cymbal Crash should always be indicated by a cross (X) in the form of a *quarter* or *eighth* note.

Ex. 10



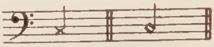
THE CHINESE GONG

The Gong is struck with a soft mallet, and is used as an Oriental effect.

THE SMALL CYMBAL

When the Small Cymbal is to be struck with the drumstick, the note should be written in the *second space* of the *staff*.

Ex. 11

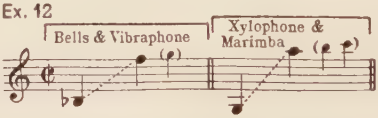


THE MELODIC GROUP

The Bells, Vibraphone, Xylophone and Marimba are constructed on the same principle as the Piano Key Board. The part to be played by either of these instruments is written in the treble clef, in the key of the composition. The writing register of this group depends upon the range of the instrument which varies in different models.

When a solo is to be written, it is best to consult the player as to the range and writing register of his instrument. When the register of the instrument is not known, the safest register would be the following:

Ex. 12



Of this group, the Vibraphone is the only instrument which cannot produce the played *tremolo* effect, since it does this automatically when a single note is sounded. In all other respects the instruments of the melodic group are played alike. This group of instruments is appropriate for playing melody or color effects.

THE CHIMES

A Chime part is written in the *treble clef.* A tremolo effect cannot be produced on the Chimes.

In writing a Chime part, it is best to confine the part to the same register as for the Bells.

Melodies written for Chimes should be of a slow-moving nature, owing to the fact that the overtones of a Chime will mar a fast-moving melody. Chimes can be used for melodic playing or color effects.

THE TRAPS

Traps of any kind should only be used when appropriate, as the use of these is left to the discretion of the player. If a special trap effect is desired, it should be indicated in the part.

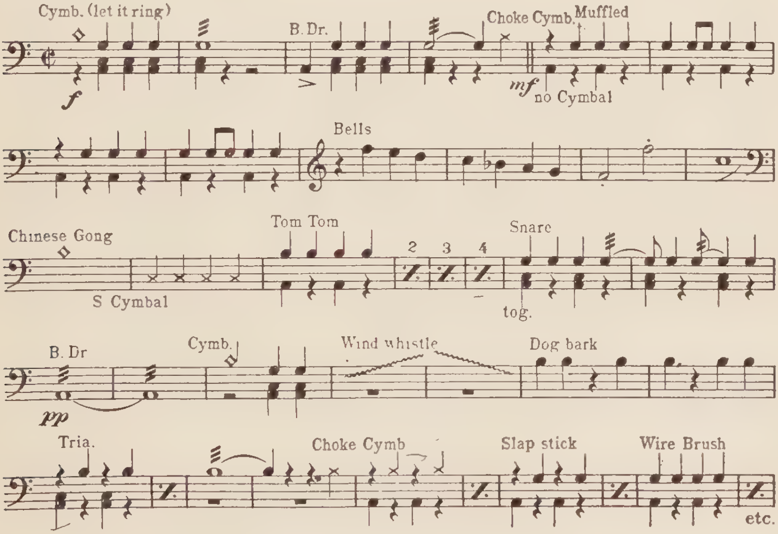
TEMPOS AND RHYTHMS

The Drum part, in all tempos and rhythms, depends on the style of the composition and the rhythm of the Piano accompaniment.

The Bass-Drum is usually written in the same rhythm as the bass of the Piano part; while the Snare Drum is similar to that of the right-hand Piano part.

The following example shows the general appearance of a Drum part:

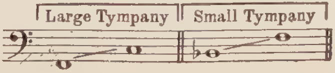
Ex. 13



THE TYMPANYS

The Tympany is a drum, which can be tuned to any musical pitch. There are usually two Tympanys used in the average orchestra, one of which is large and the other somewhat smaller. The larger of these two produces the lower tones, whereas the smaller-sized Tympany produces the higher tones.

Ex. 14

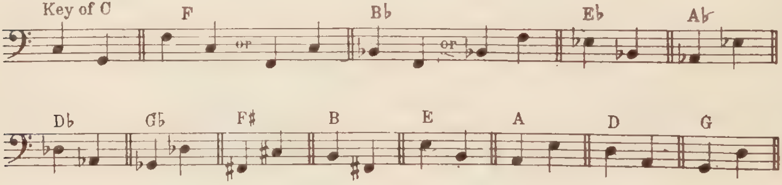


Two different kinds of mallets may be used in striking a Tympany. Soft mallets are usually used, but when a loud effect is desired the hard mallets are used. The use of the Tympanys is very effective in forte passages.

The Tympany can be played in single beat or roll fashion. The Tympany part is written in the *bass clef,* and in appearance is similar to the Bass Violin or Tuba part. The practical tuning range of the larger Tympany is from *F* to *C,* and for the smaller Tympany from *B*♭ to *F.*

Tympanys are usually tuned in the key of the composition; one of the two representing the key-note, and the other the *fifth* of the scale.

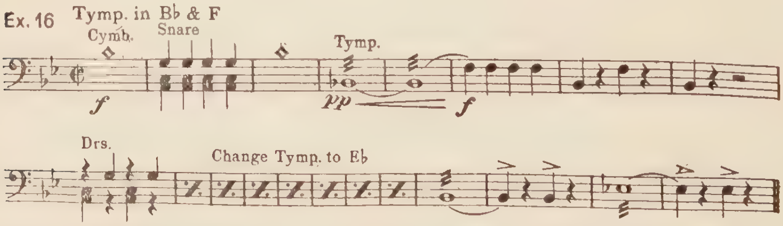
Ex. 15



During the course of playing, the Tympany may be re-adjusted to any pitch, so as to meet a change of harmony occurring in the composition. It is necessary to allow the player ample time for retuning.

The following example shows the general appearance of a Tympany part:

Ex. 16



Some Tympanys have foot-lever attachments, whereby the Tympany can be tuned faster than by hand. This type of Tympany is called a "Machine Tympany."

Chapter X

KEYS AND TRANSPOSITION

Before beginning to score for the various instruments of the dance orchestra, it is necessary to have a thorough knowledge of the keys in which the transposing instruments are to be written.

A transposing instrument is one which is not written for in the key of the composition, but in such a key that when played on the instrument, the correct pitch is obtained. This transposition is necessitated by the various lengths of tubing of the instrument. The longer the tubing, the lower the pitch; the shorter the tubing, the higher the pitch.

When writing for transposing instruments, it is necessary to indicate the key of the instrument, i. e., *B♭* Soprano Saxophone, *C* Soprano Saxophone, *E♭* Alto Saxophone, *B♭* Trumpets, etc.

There are three different instrument pitches used in the dance orchestra, viz., *C, E♭,* and *B♭*.

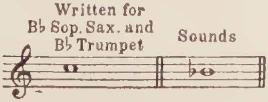
C. Instruments

The Piano, Violin, Tenor Banjo, Bass, Trombone, C Melody, Saxophone, C Soprano Saxophone and the Melodic group of the Drums are C instruments, and are written in the key in which they are to sound, i. e., the key of the composition.

B♭ Instruments

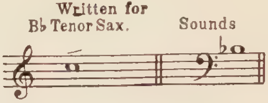
B♭ instruments are those which sound *one full tone* or key lower than written. There are two kinds of B♭ instruments in the dance orchestra. The B♭ Trumpet and the B♭ Soprano Saxophone are of the kind which sound one tone lower than written.

Example 1



The other is the B♭ Tenor Saxophone, which is written one key higher than the C instruments, but sounds *one full tone* and *an octave* lower than written.

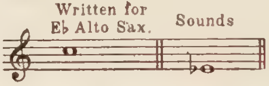
Ex. 2



E♭ INSTRUMENTS

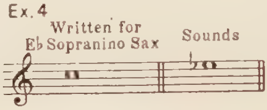
There are three kinds of E♭ instruments in the dance orchestra. The E♭ Alto Saxophone which sounds a *major sixth* lower than written.

Ex. 3



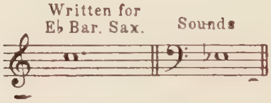
The E♭ Sopranino Saxophone which sounds a *minor third* higher than written.

Ex. 4



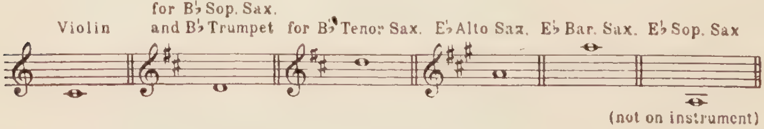
The E♭ Baritone which sounds a *major sixth* and an *octave* lower than written.

Ex. 5



In accordance with all the above, the parts to be played by these various transposing instruments must be written in a key which will automatically make each respective instrument sound in the concert key. Therefore, if the middle *C* is to be sounded simultaneously by all the transposing instruments quoted above, those pitched in C are written *C*, while those pitched in B♭ would have to be written *D*; and those pitched in E♭ would have to be written *A*.

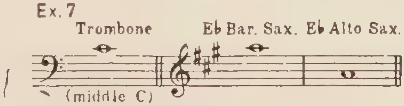
Ex. 6



In the above shown example, note that the B♭ Trumpet and B♭ Soprano Saxophone are written alike, whereas the E♭ Sopranino, E♭ Alto, and E♭ Baritone are written in three different octaves. This is necessary because the different sizes of each instrument, although all pitched in E♭, affect the playing range.

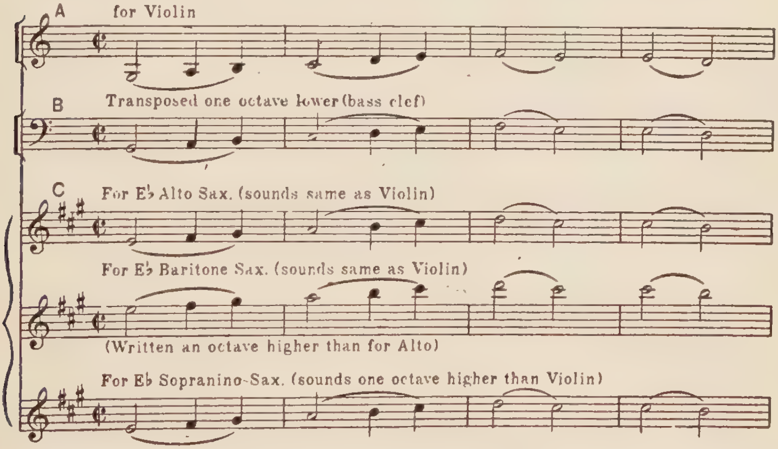
It is necessary to be thoroughly familiar with the system of transposing, so that difficulty in writing the various parts is overcome. A very practical method of transposition can be applied to all E♭ instruments. The following example shows a *C* written in the key of *C,* for the Trombone, which is a C instrument, followed by an *A* written in the key of *A* for the E♭ Saxophones.

Ex. 7



Suppose, for the sake of example, the *treble clef,* applied to the Saxophone notes, were replaced by a *bass clef,* the notes for the Saxophones then would be the same as for the Trombone (*C*). Another way of explaining this is by the following example.

Ex. 8

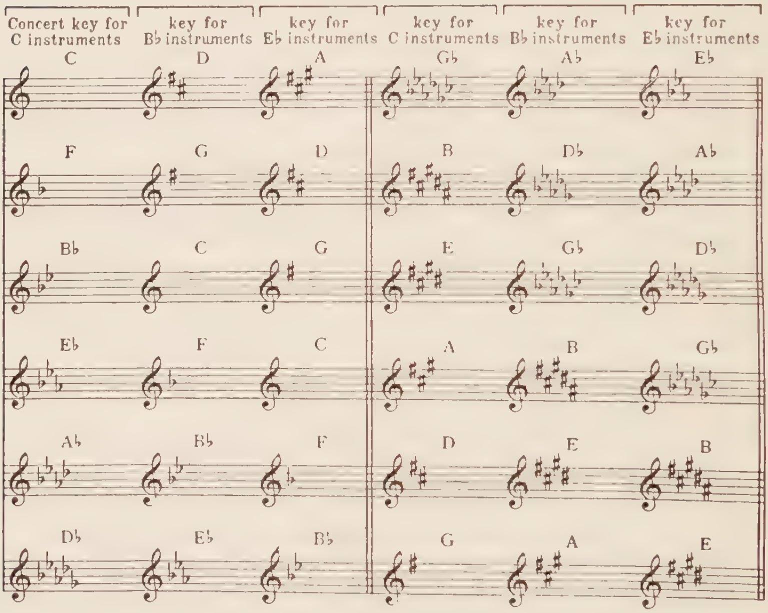

A
for Violin
B
Transposed one octave lower (bass clef)
C
For E♭ Alto Sax. (sounds same as Violin)
For E♭ Baritone Sax. (sounds same as Violin)
(Written an octave higher than for Alto)
For E♭ Sopranino-Sax. (sounds one octave higher than Violin)

In example 8, A shows a part written for the Violin in the *treble clef.* B shows A written in the *bass clef.* C shows A written for the E♭ Alto Saxophone. Note that B and C appear alike in notation, the only difference being that they are in different keys. This shows how this method of transposing can be applied to writing E♭ Alto parts. If the same is to be written for the E♭ Baritone Saxophone, it is only necessary to transpose the Alto notation an *octave higher.* The E♭ Sopranino part shown in C will sound an *octave higher* than A.

For quick reference to keys for transposing instruments relative to C instrument, the chart, shown on page 64, has been compiled. In this chart the concert key is directly followed by the key signatures in which the B♭ and E♭ instruments are to be written.

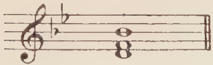
In selecting keys in which to arrange compositions, the keys in which the transposing instruments are to be written must be considered. Although any key is playable on the transposing instruments, it is necessary to avoid writing in a signature of too many *sharps* or *flats*. No more than *three sharps* or *four flats* are practical for B♭ instruments, and no more than *four sharps* or *four flats* are practical for E♭ instruments.

KEY CHART

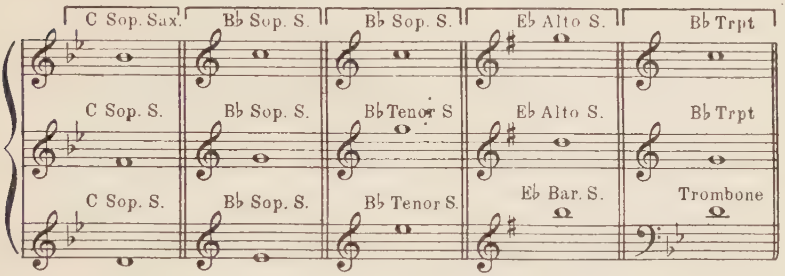


It will be instructive when scoring a chord for the different pitched instruments to first write the chord in the concert key. It is then easy to transpose each respective note of the chord to the proper key and pitch of any transposing instrument to which it is to be applied.

The following examples show a *B♭ chord* written in the concert key followed by the same chord distributed to the various transposing instruments:



The above shown chord is applied to the various transposing instruments in the following way.



Transposing is a very important factor when making arrangements and, therefore, a thorough study of this subject is necessary before beginning to score. Although scoring can be done in the concert key, it will later become necessary to transpose the Saxophone and Trumpet parts to their respective keys. This system can be applied at the beginning, but should later be discontinued when one becomes more proficient in transposition.

In all the following chapters the examples shown are written in the proper keys for transposing instruments. This is done so as to cultivate a keen sense of transposition.

Chapter XI

DYNAMICS, PHRASING AND TEMPO

Dynamics.

Dynamic marks or signs are written in conjunction with notes indicating the gradations of power, or the intensity with which these notes are to be played.

It is important that these signs be written, so that the players are constantly instructed how a musical phrase is to be interpreted. Dynamics are so numerous that it is impossible to mention all. However the most used are shown in a table of dynamics on pages 68 and 69.

Phrasing.

Phrasing is necessary to the artistic performance of a piece of music, so that the thought may be brought out with greatest effect. Phrasing for the string instruments refers namely to bowing. This has already been explained in Chapter One.

Phrasing for the Piano refers mostly to the variety of touch and the use of the pedals.

A note may be sustained on the Piano for a length of time after it has been struck, by either holding down the key or the sustaining pedal. The moment this pedal is raised, or the finger lifted, the tone ceases. In *staccato* playing the sustaining pedal is never used, and because Piano accompaniments in dance music must be definite and clear, the sustaining pedal should be used with discretion.

Chime and Music-box effects are made more realistic by continually holding down the sustaining pedal.

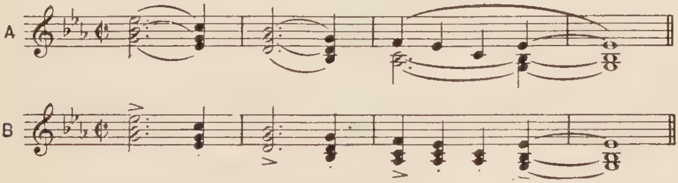
Phrasing for the Saxophones and Brass is similiar to that of the string instruments, the only difference being that on string instruments it is produced with the bow, whereas on the wind instruments, it is produced with the breath and tongue.

There are two ways of playing *staccato* on the Saxophone. The first of these is the ordinary *staccato*, or short notes. The second is the effect commonly known as *"slap-tongue."* The *staccato* or *"slap-tongue"* is very useful in dance music because it accentuates a definite rhythm.

Legato phrasing is extremely necessary in arranging melodies of a smooth nature, and when such a melody is being arranged as a duet or trio for Saxophones, the phrasing of all instruments concerned should be written alike as far as possible.

The breathing of the player can be indicated by *slurs.* Such slurs are important, especially in duets or trios. *Slurs, accents* and *staccato* when used in different ways, will produce different effects, and change the rhythmic sense of the composition. This is illustrated in the following example of a trio which can be played by either Saxophones or Brass.

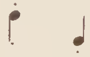
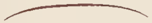
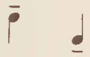
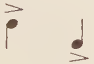
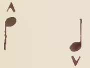
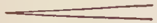
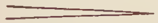
Example 1

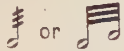
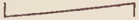
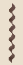
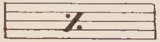
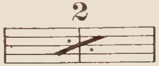
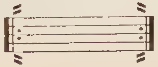


Note the difference in phrasing between example A and example B.

The use of Dynamics cannot be overdone when the character of the composition demands a certain interpretation. If the Dynamics are omitted, the players will give their own style of interpretation, thereby probably ruining a perfectly good arrangement. Although instructions can be given at a rehearsal, these are usually forgotten, but if they are indicated by Dynamics, they are constantly before the player as a reminder. During the following chapters, Dynamics will be noticed in nearly all of the examples, and in studying these examples, the Dynamics governing the interpretation of the notes are just as important as the notes themselves.

TABLE OF SIGNS AND DYNAMICS

SIGN	TERM	DEFINITION	SIGN	TERM	DEFINITION
	*staccato*	short		*legato*	smoothly
	*tenuto*	full duration of time value		*tie*	hold over for time duration of notes tied
	*marcato*	accented		*corona*	pause or hold
	*molto marcato*	very much accented	rall. or rit.	*rallentando* *ritardando*	gradually slower
	*crescendo* *or cresc.*	gradually louder	accell.	*accellerando*	gradually faster
	*diminuendo* *or dim.*	gradually softer	mor.	*morendo*	dying away
pp	*pianissimo*	very soft	*8va*	*octavo*	when placed above notes octave higher; below notes octave lower
p	*piano*	soft	a. p.	*actual pitch*	applied to Banjo music

mf	*mezzo-forte*	medium loud	o. p.	*octave pitch*	applied to Banjo music
f	*forte*	loud	s. t.	*slap tongue*	applied to the Saxophones
ff	*fortissimo*	very loud	flutter	*flutter tongue*	applied to the Brass instruments
fz	*forzando*	with sudden force	*tr*~~~	*trill*	to rapidly alternate two notes
	*tremolo*	a rapid shake of one or more notes	gliss.	*glissando*	to slide from one note to another
𝄋	*Dal Segno*	repeat from sign		Ped. ❊	indicates the use of the sustaining pedal of the Piano
𝄌	*Coda*	special ending		*arpeggio*	applied to the chords on the Piano or Banjo
pizz.	*pizzicato*	to pluck the strings with the fingers	arco	*arco*	to play with the bow
	*abbreviation*	indicates the repetition of the previous measure		*abbreviation*	indicates the repetition of the two previous measures
/ / / /	*abbreviation*	indicates repetition of same chord		*repeats*	placed at the beginning and end of strain to be repeated

TEMPOS.

Tempos in dance music vary. These are usually governed by the character of the melody. In giving the speed of the proper tempos "Maelzel's Metronome," which is a device invented for the purpose of governing tempos, is the best medium to use.

The following metronome markings are translated by sliding the weight on the pendulum to the number, and setting the pendulum in motion. If the number on the marking is preceded by a *quarter* note, each beat of the pendulum represents the time duration of a *quarter* note, and if the number is preceded by a half-note, the time duration is a *half-note.*

Fox-Trots vary from about *half-note*—104 to *half-note*—88.

M.M. 𝅗𝅥 = 104 to M M 𝅗𝅥 = 88

Each beat of the Metronome represents two quarter notes of the measure, i. e., two beats to a measure, alla breve.

The tempo of the Charleston, which is a by-product of the Fox-Trot, is the same tempo as the Fox-Trot.

The tango is played at approximately *quarter-note*-132.

M M ♩ = 132

Each beat of the metronome represents the first and third beat of each measure, i. e., two beats to a measure, alla breve.

The "Blues" or "Drag" can be played anywhere from *quarter-note*-168 to *quarter-note*-132.

M ♩ = 168 to M M ♩ = 132

The Waltz is usually played at about *quarter-note*-116.

M. ♩ = 116

All of these tempos are approximate. They are only given as a guide to those who are unfamiliar with American Dance Music.

CHAPTER XII

DUET FORM

A duet is a composition for two musical instruments, either of the same kind, or two different kinds; both parts are of equal importance.

Although a thorough knowledge of harmony is beneficial, it is not necessary to have studied harmony in order to write good duets. A sensitive ear and good taste, combined with good judgment, will answer the purpose.

Before attempting to write Saxophone or Brass duets, it is necessary to be thoroughly familiar with all forms of duets. This chapter deals only with the general construction of the various duet forms, and the rules given can later be applied to any combination of instruments. All the examples shown are written in the *concert* key, and do not apply to any particular instrument.

DUET CONSTRUCTION

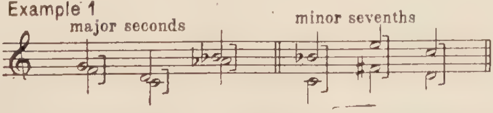
A duet consists of two-part harmony. The first part melody, and the second part the most important interval of the chord on which the melody is based.

The first important subject to deal with is the selecting of the proper interval which must occur between the two parts. The following are rules which should be applied to all duet arrangements.

INTERVALS

The notes comprising a duet should be no more than an interval of a *minor seventh*, or less than a *major second* apart.

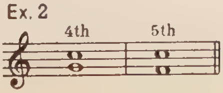
Example 1



A succession of *sevenths* or *seconds* has an unpleasing effect on the ear, and should be avoided.

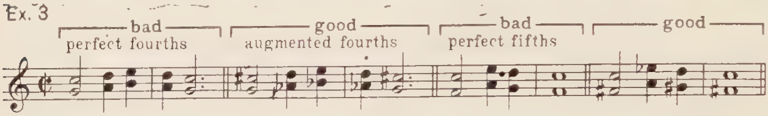
Intervals of a *perfect fourth* or *fifth* should be written only when unavoidable, but under no circumstances should they be sustained too long.

Ex. 2



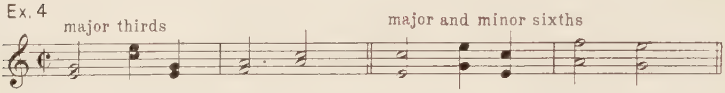
A succession of *perfect fourths* and *fifths* should never be written. However, if one of the notes is altered by a *sharp* or *flat,* which augments the interval by a *semi-tone*, they may be written with good result.

Ex. 3



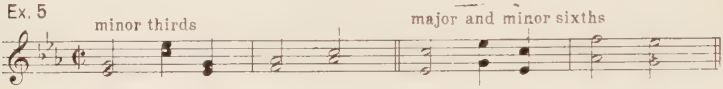
Intervals of *major thirds* and *sixths* are strictly characteristic of a duet. These intervals are preferred to all others.

Ex. 4



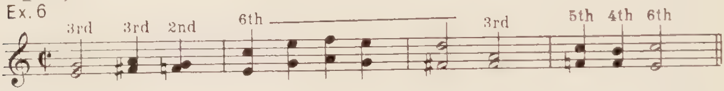
The same applies to *minor thirds* and *minor sixths.* A succession of *major* or *minor sixths* and *thirds* may be written freely.

Ex. 5



In writing a duet, it is permissible to change the intervals so that they alternate with each other. This is particularly good form when the melody moves in wide intervals.

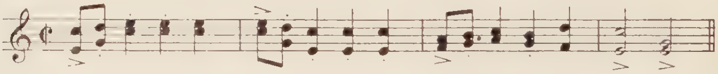
Ex. 6



Concerted Duet

A concerted duet is one in which the two parts are written in the same rhythm.

Ex. 7

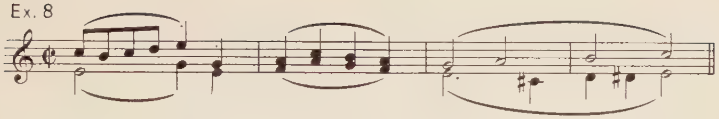


This form is particularly good for duets of a *staccato* nature. It is necessary that the two parts be phrased alike so that the concerted effect is obvious.

Semi-Concerted Duets

A semi-concered duet is one in which the two parts are written in different rhythms. This form is effective in duets of a *legato* nature. The second part may be written so as to follow out the harmonic structure of the composition while the melody is being sustained.

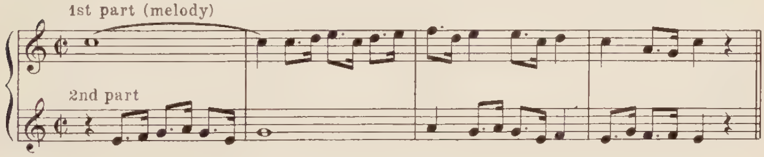
Ex. 8



COUNTER DUETS

A counter duet is one in which the two parts are rhythmically entirely different. The second part may be written in any rhythmic form as long as the harmonic structure is not interfered with.

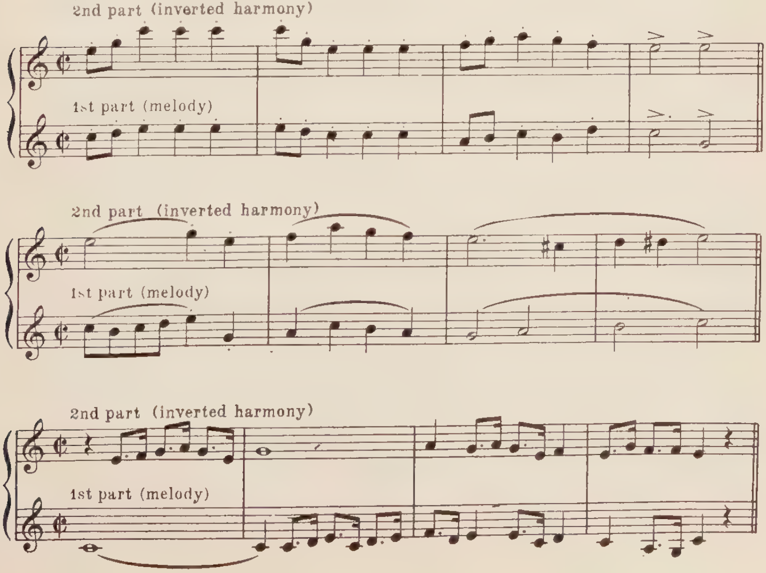
Ex. 9



INVERTED DUETS

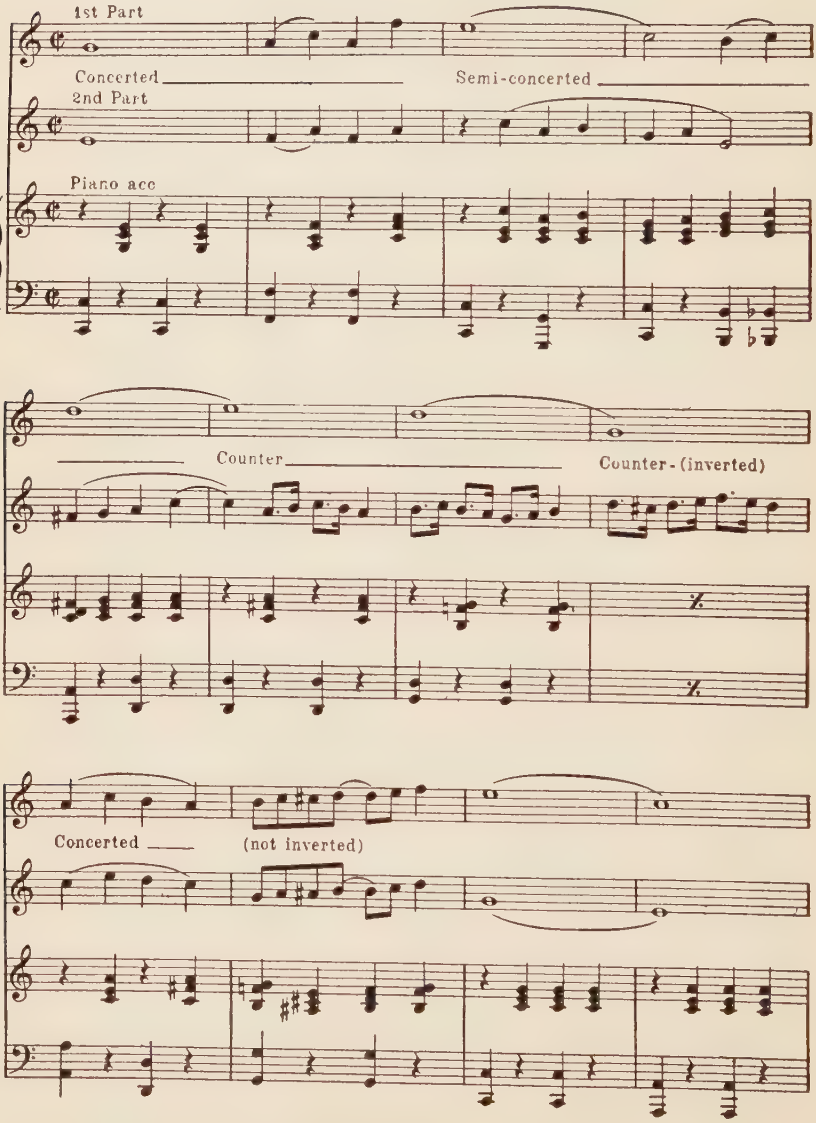
An inverted duet is one in which any of the aforesaid are written in inverted form. This is done by writing the melody for the second part and the harmony for the first part. The following examples show the inverted form of examples 7, 8 and 9:

Examples 7, 8 and 9 in Inverted form


2nd part (inverted harmony)
1st part (melody)
2nd part (inverted harmony)
1st part (melody)
2nd part (inverted harmony)
1st part (melody)

All the aforesaid rules and duet forms are more clearly illustrated in the following example of a duet to which a Piano accompaniment is written.

Ex. 10



All the above-shown examples are written in the *treble clef.* The rules given in connection with these also apply to the *bass clef,* or the *bass* and *treble clefs* combined. This will be fully explained in the chapter on Brass Units.

The next chapter, which deals with "Trio Form," will further develop two-part writing and introduce the Trio.

Chapter XIII

TRIO FORM

Before beginning the study of three-part writing, one must be thoroughly familiar with the duet in all its forms.

A trio is a composition for three musical instruments, either of the same kind or three different kinds; all parts are of equal importance.

Trio Construction

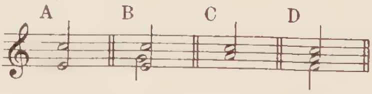
All trios are based on harmonic *triads*. Each *triad* is the common chord of three notes made up of the fundamental note plus notes of an interval of a *third* and *fifth*, respectively—i.e., each individual part of a trio represents a different note of the triad; the first part melody, the second part harmony, and the third part harmony different from that of the second part.

As mentioned before, every musical chord consists of three or more notes. Chords of only three notes are easily applied to three instruments, owing to the fact that there is no other choice. In chords which consist of four or five notes, the selection of the proper notes for the three parts is more intricate.

Intervals

All the rules of *intervals* assigned to the duet also apply to the trio. When the other note of the chord is added to an already constructed duet it forms a trio.

Example 1



A shows an interval of a *sixth,* which up to this time has been called a duet. The upper note constitutes the melody.

B shows the third note *G* of the chord added between the two notes shown in A.

C shows an interval of a *third,* the upper note being the melody.

D shows the third note *F* of the chord added below the notes shown in C.

The third note is usually added between or below the intervals of a duet. Although this note may be added above the duet, it is not good form, owing to the fact that it would place the melody note in the center as will be explained later.

Adding a third note to the duet does not form a *chord* in all instances. There are several rules governing such addition, by which a perfect *triad* is formed.

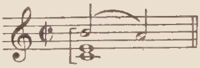
The third note to be added should at no time be doubled or written in octaves with either one of the notes already written. Sometimes the duet notes are written so closely together that the third note can only be added below that respective duet. In such instances, the lower duet note becomes the center note of the trio.

In the previous chapter it was ruled that the notes comprising a duet should be no more than the interval of a *minor seventh* apart. This rule also applies to the two outer notes of a trio and should be adhered to when a *close-harmony* trio is to be arranged.

Writing *open-harmony* will be explained later.

An interval of a *major seventh* is allowable when the upper note of the trio constitutes the melody. In harmony this is known as a suspension.

Ex. 2

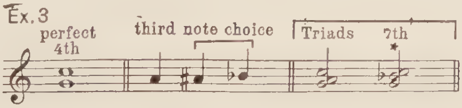


When a third note is to be added between the two notes of a duet, the note added must be no closer than a whole-tone to either of the two notes, which comprise the duet.

The following explanations and examples will show the choice of notes that may be added between a duet. In some instances, a perfect chord is formed, and in other instances a dissonant chord is formed. All notes marked by a (*) are common triads.

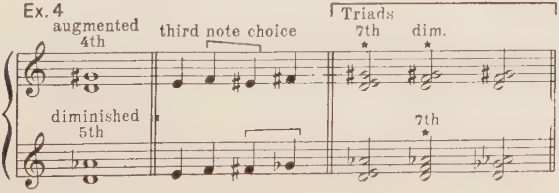
Between an interval of a *fourth* one may add a choice of *two* different sounding notes.

Ex. 3



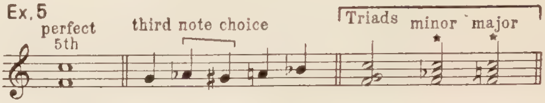
Between an interval of an *augmented fourth* or *diminished fifth* there is a choice of *three* different sounding notes.

Ex. 4



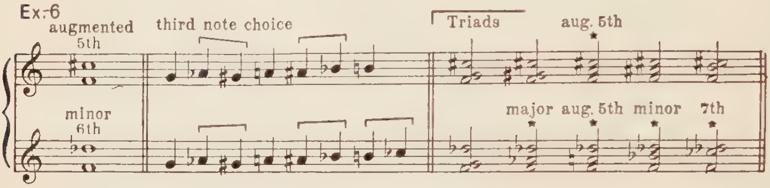
Between an interval of a *perfect fifth* there is a choice of *four* different sounding notes.

Ex. 5



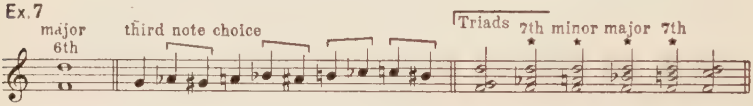
Between an interval of an *augmented fifth* or a *minor sixth* there is a choice of *five* different sounding notes.

Ex. 6



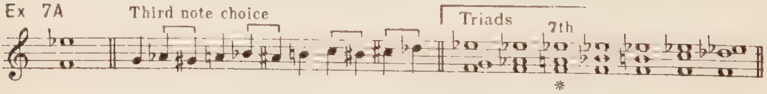
Between an interval of a *major sixth* there is a choice of *six* different sounding notes.

Ex. 7



Between an interval of a *minor seventh* there is a choice of *seven* different sounding notes.

Ex 7A

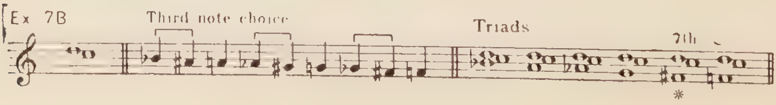


The notes *not* marked by a (*) are suspensions, which must be resolved into another chord.

A third note should never be added between an interval of a *second* or *minor third.*

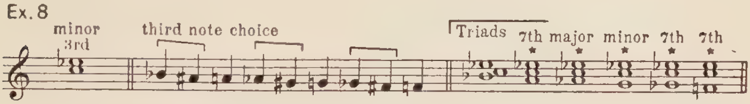
A choice of *six* different sounding notes may be added *below* an interval of a *second.*

Ex 7B



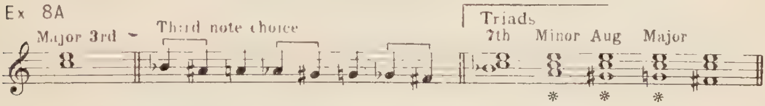
A choice of *six* different sounding notes may be added below an interval of a *minor third.*

Ex. 8



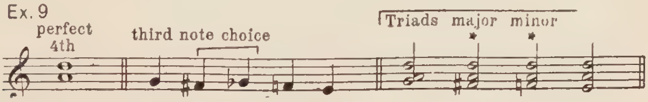
A choice of *five* different sounding notes may be added below an interval of a *major third.*

Ex 8A



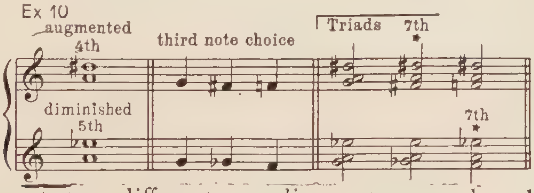
A choice of *four* different sounding notes may be added below an interval of a *perfect fourth.*

Ex. 9



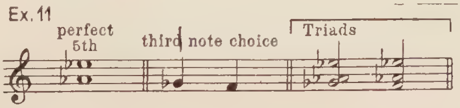
A choice of *three* different sounding notes may be added below an interval of an *augmented fourth* or *diminished fifth.*

Ex 10



A choice of *two* different sounding notes may be added below an interval of a *perfect fifth.*

Ex. 11

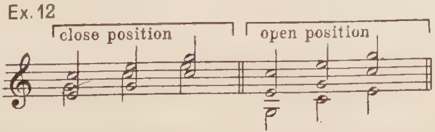


A third note should *never* be added below an interval of an *augmented fifth,* a *sixth* or a *minor seventh.*

Open Position

An open position triad is formed by transposing the center note of a triad an octave higher or an octave lower.

Ex. 12

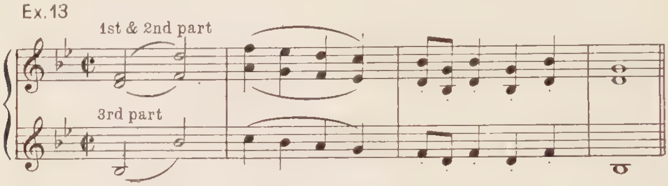


This form of trio is permissible when the playing range of the three instruments to be written for does not allow close position form. This will be further explained in a later chapter.

CONCERTED TRIO

A concerted trio is one in which the three parts are written in the same rhythm.

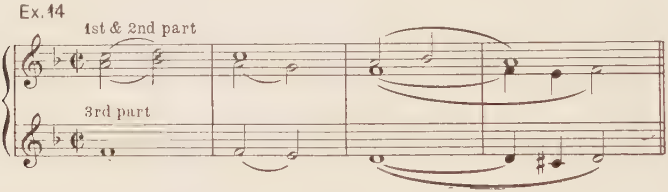
Ex. 13



SEMI-CONCERTED TRIO

A semi-concerted trio is one in which one or two parts are written in different rhythms. The second, third or both of these parts may be written so as to follow out the harmonic structure of the composition while the melody is being sustained.

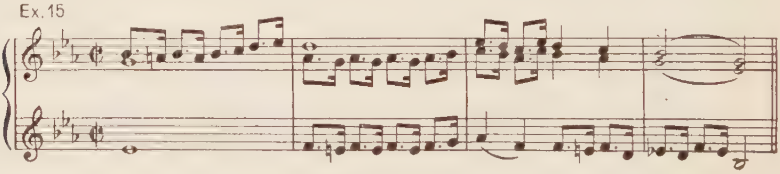
Ex. 14



COUNTER TRIO

A counter-trio is one in which one or two parts are rhythmically entirely different. The second, third or both of these parts may be written in any rhythmic form as long as the harmonic structure is not interfered with.

Ex. 15



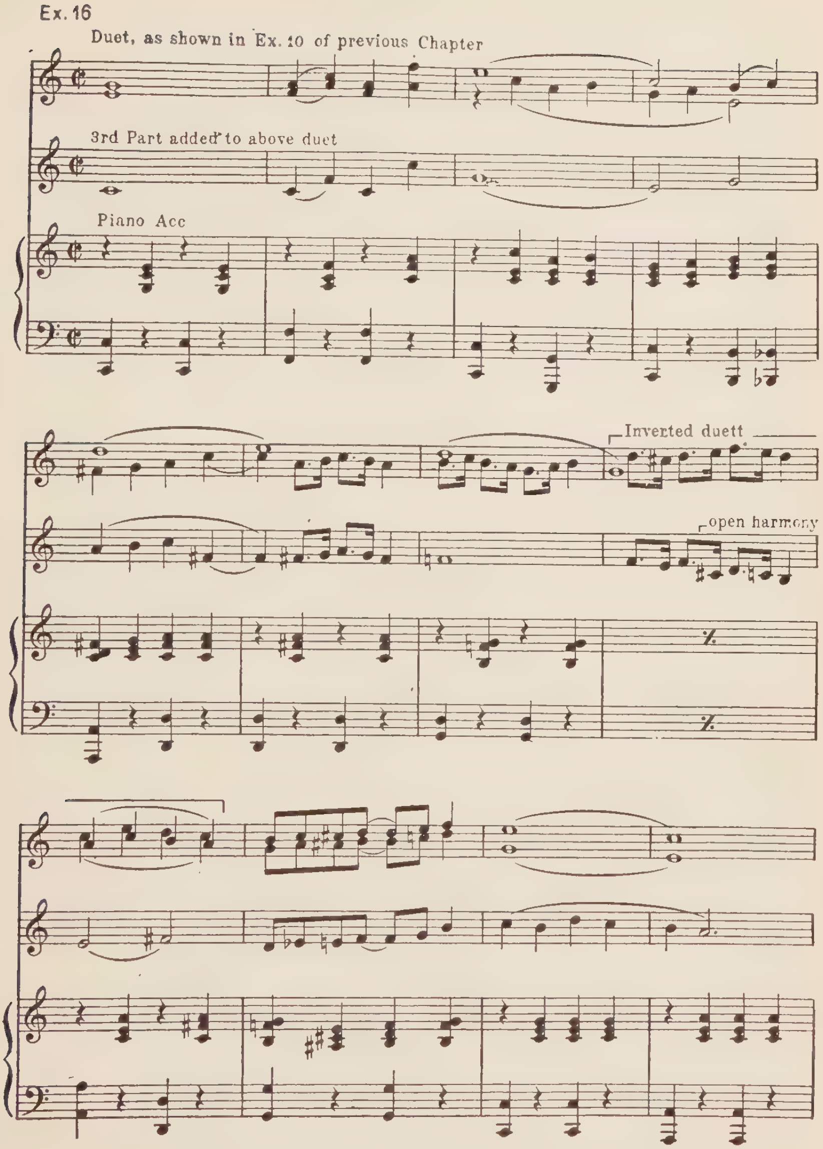
INVERTED TRIO

An inverted trio is one in which any of the aforesaid are written in inverted form. This is done by either writing the melody for the second or third part, and the harmony for the remaining two parts.

Trio form is the harmonic structure mostly used in American Dance Music. Many interesting effects and harmonies are possible. Application and practice will bring about splendid results. If at first a trio does not satisfy, it is advisable to make changes until a perfect trio is obtained.

The following is a trio arrangement of example 10, shown in the previous chapter, which deals with duet form. This will illustrate how the third part is added to an already written duet.

Ex. 16


Duet, as shown in Ex. 10 of previous Chapter
3rd Part added to above duet
Piano Acc
Inverted duett
open harmony

When applying the duet or trio form to instrumentation, the playing range of the different instruments will greatly influence the construction of a trio. In most instances the tone-color of the instruments will improve the sound of the trio. It is permissible to use the Piano for testing the harmonic structure of a trio before applying same to instruments.

CHAPTER XIV

THE UNITS

When studying instrumentation, a technical, as well as practical knowledge of each respective instrument must be obtained. After this is completed, the instruments are again analyzed in combined form.

The instrumentation of the Symphony Orchestra consists of Violins, Violas, Cellos, Basses, Flutes, Oboes, Clarinets, Bassoons, Horns, Trumpets, Trombones, Tuba, Harp, etc. When divided into sections, they are termed; String choir, Woodwind choir, Brass choir and Percussion.

The instrumentation of the Modern Dance Orchestra is; Violin, Saxophones, Trumpets, Trombone, Banjo, Bass, Piano and Drums. These instruments can be applied to as many players as desired, and like the Symphony Orchestra, are also divided into sections. However, these sections cannot be termed choirs, because the instruments employed in each section are subject to different conditions from those of the Symphony Orchestra. In the Dance Orchestra, these sections are termed Units, viz., Saxophone Unit, Brass Unit and Rhythmic Unit. Unless more than one Violin is employed, this instrument, as incorporated in the Dance Orchestra, cannot be termed a Unit. It must then be considered a solo instrument and independent factor, which can be combined with the other Units.

In scoring for the Symphony Orchestra, the String choir is the foundation; in the Modern Dance Orchestra, the Saxophone and Rhythmic Units are the foundation. This eliminates the solo Violin as an important factor. The Standard Dance Orchestra consists of three Saxophones, three Brass Instruments, and four Rhythm Instruments, to which a Violin may be added. In unit form these instruments appear as follows:

Solo Violin.

Saxophone Unit {
1st Saxophone.
2nd Saxophone.
3rd Saxophone.

Brass Unit {
1st Trumpet.
2nd Trumpet.
Trombone.

Rhythmic Unit.	Piano Tenor Banjo Tuba or Bass Violin Drums, etc.

In foregoing chapters, each of these instruments has been dealt with separately, but in the following, they will be dealt with in unit form as shown above. However, before doing this, it is necessary that the tone-color values of each respective instrument be analyzed. This is done in the next chapter, which deals with "Color Relations."

CHAPTER XV

TONE COLOR RELATIONS

With the closing of the last chapter the fundamental principles of the Rhythmic, Brass and Saxophone Units have been thoroughly explained. It is now necessary to give instructions as to how the three units are to be combined when making an arrangement. Before this can be done, it is necessary to have a knowledge of the comparative color-values of the units and the instruments concerned in each.

In making an arrangement, three distinctly different and fundamental tone-colors present themselves. The first of these is the "Round" tone-color, similar to the word "Oh." The second of these is the "Open" tone-color, similar to the word "Ah." The third is the "Piercing" tone-color, similar to the vowel "E."

All instruments, under certain conditions, produce different tone-colors. The principal instruments to analyze are those which possess more than one tone-color. They are as follows:

Violin
Saxophones
Trumpets
Trombone

The first of these to deal with are the instruments of the Brass Unit.

BRASS UNIT TONE-COLORS

The Brasses can produce three tone-colors. When a Trumpet or Trombone is played open it produces the Open tone-color. When it is muted by any type of metal or fibre-mute, it produces the Piercing tone-color, and when played open through a megaphone, or in hat, it produces the Round tone-color.

SAXOPHONE UNIT TONE-COLORS

In describing the tone-colors of the Saxophone Unit, each of the different Saxophones will be dealt with individually. The first is the E♭ Baritone.

E♭ BARITONE SAXOPHONE

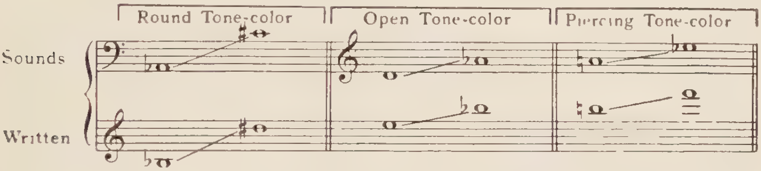
This instrument only possesses the Round tone-color, similar to that of the Trombone "Open in Hat." The upper register of the Baritone

Saxophone is somewhat thinner in volume. This does not change the fundamental tone-color of the instrument.

B♭ Tenor Saxophone

The B♭ Tenor Saxophone possesses the three fundamental tone-colors. This is illustrated in the following example. The notation of the registers are written in concert key.

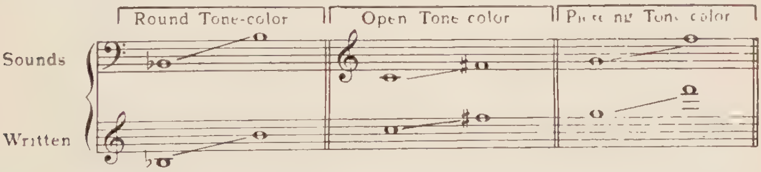
Example 1 TONE COLORS OF THE B♭ TENOR SAXOPHONE



C Melody Saxophone

The C Melody Saxophone is very similar to the B♭ Tenor Saxophone. In range there is very little difference between the two, but in tone-color there is much difference. In build, the instrument is closer related to the E♭ Alto than it is to the B♭ Tenor. For this reason its tone-color is similar to the E♭ Alto. The register of the tone-colors are shown in the following example:

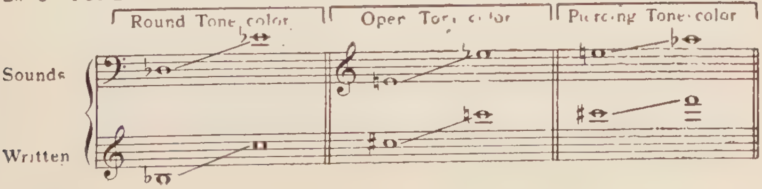
Ex 2 TONE COLORS OF THE C MELODY SAXOPHONE



E♭ Alto

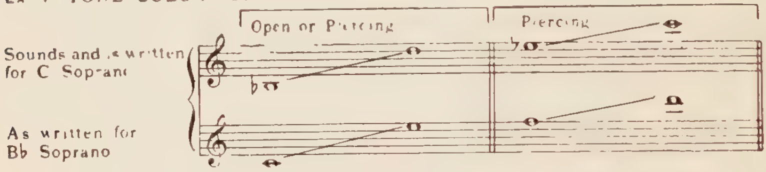
The E♭ Alto also possesses the three tone-colors, as shown in the following example:

Ex 3 TONE COLORS OF THE E♭ ALTO SAXOPHONE



Soprano Saxophone

The Soprano Saxophones—viz., *C* and *B♭*, possess only two of the fundamental tone-colors. The pitch and build of these instruments eliminate the Round tone-color. Therefore, only the Open and Piercing tone-colors are associated with them. The written concert *D*, shown in the following example, represents the point of division between the two tone-colors. Tones above this note are of the Piercing tone-color, whereas tones below this note are closely related to the Open tone-color. The low register is really a composite of Open and Piercing.


Ex 4 TONE COLORS OF THE SOPRANO SAXOPHONES
Open or Piercing
Piercing
Sounds and as written for C Soprano
As written for B♭ Soprano

E♭ Sopranino Saxophone

This instrument is entirely confined to the Piercing tone-color.

The foregoing tone-colors, as applied to the Saxophones, are purely theoretical. The use of different kinds of reeds and mouthpieces are apt to vary the tone-colors to some extent. It must be realized that the tone-color of the Saxophone is sweet in quality and does not change suddenly at the points designated in the examples. When playing the chromatic scale on the Saxophone, from its lowest to its highest note, the tone-color changes gradually and blends from one into the other.

Violin

The Violin produces two of the fundamental tone-colors — viz.: Round and Piercing. The register of these two cannot be designated. The same note can be played in both tone-colors in different positions on the instrument. In general, the low register is of the Round, whereas the upper register is that of the Piercing tone-color. The *pizzicato* is of the Plectrum color, similar to that of the Tenor Banjo.

Bass Tuba and Bass Violin

These two instruments are of the Round tone-color. The Bass Violin is capable of playing in a lower register than the Tuba. Therefore, this instrument is deeper in tone-color than the Tuba.

The following is a summary of the foregoing analysis, in group form.

ROUND TONE-COLOR GROUP

Violin	Low register
Trumpet	Hat mute
E♭ Alto Sax	Low register
C Melody Sax	Low register
B♭ Tenor Sax	Low register
E♭ Baritone Sax	Entire register
Trombone	Hat mute
Tuba	Entire register
Bass Violin	Entire register

OPEN TONE-COLOR GROUP

Trumpet	Open
Soprano Sax	Low Register
E♭ Alto Sax	Middle Register
C Melody Sax	Middle Register
B♭ Tenor Sax	Middle Register
Trombone	Open

PIERCING TONE-COLOR GROUP

Violin	High register
E♭ Sopranino Sax	Entire register
Trumpet	Muted
Soprano Sax	Entire register
E♭ Alto Sax	High register
C. Melody Sax	High register
B♭ Tenor Sax	High register
Trombone	Muted

By combining any of these tone-colors another tone-color is again produced.

DUPLEX AND COMPOSITE TONE-COLORS

When the same tone-color is doubled it produces the "Duplex" tone-color. When two different tone-colors are combined it produces the "Composite" tone-color.

TONE-COLOR OF THE RHYTHMIC UNIT

The tone-color of the Rhythmic Unit is indefinite. However, it should be stated that the Rhythmic Unit represents an individual tone-color, which acts as a background to any other color effect.

The Piano

The Piano has an individual tone-color, and in so much that it is a rhythm instrument only adds sonority to any other tone-color played by either the Saxophone or Brass Units. The Piano accompaniment cements and rounds out the tone-color of the entire Rhythmic Unit. However, when used as a solo instrument, it produces a tone-color neutral to any other instrument.

The Tenor Banjo

The Tenor Banjo is strictly of the Plectrum color and does not figure in the harmonic or color structure, only to a rhythmic extent. It has at all times a penetrating effect, which can only be modified by the use of a mute.

The Drums

The Bass Drum, muffled Snare Drum, Tympany, Chimes and Marimba are of the Round tone-color. The Snare Drums, Wire Brush, Cymbals, Xylophone, Bells, Triangle, Wood Block, Traps, etc., are of the Piercing tone-color.

The color value of the Drum is very much like that of the Tenor Banjo. The only difference is, that a musical tone is produced on the Banjo, whereas on the Drum only a rhythmic beat is produced. However, the Snare Drum with "Snares on" blends with the Piercing tone-colors, while the muffled Snare Drum blends with the Round tone-colors. The sound produced by a Bass Drum beat is similar to the Round tone-color. Therefore, when the Tuba, which is of the Round tone-color, is used in conjunction with Bass Drum beats, it produces a "thud," which is musical only to the extent of the Tuba. This is offset by the Piercing tone-color of the Snare Drum and Plectrum color of the Banjo. However, this does not apply to the Bass Violin. This instrument is not used as much as it should be. Rhythmically, it is superior, and in tone richer, which makes the Rhythmic Unit sound more musical. The Tuba is preferred on account of its capabilities in harmony and also for appearance.

Application of Tone-Colors

In combining the Violin, Saxophone, Brass and Rhythmic Units the tone-color of each Unit must be selected so as to be appropriate. This applies mostly to the Saxophone and Brass Units. Both of these Units may be written in the same tone-color when such an effect is desired. This is usually exercised in conjunction with a full ensemble effect, but when these two Units are to be written so as to express a Trick or Color effect, contrasting tone-colors should be used. The Piercing tone-color is a direct opposite to the Round tone-color. By employing these tone-colors, a strong contrast is produced. When combining the Open and Piercing tone-colors the contrast is not so apparent, and when the Open and Round tone-colors are combined, then the contrast is still less apparent.

There are instances in making an arrangement when three instruments are employed in playing the same tone, either of the same tone-color group, or of two or three different groups. This produces a unison effect, which tone-color is influenced by the one most prominently represented. In applying these various tone-colors to the duet or trio form, it is advisable to employ those tone-colors closely associated with each other, preferably instruments of the same unit. A close position trio, written for the Saxophone Unit, should be confined to the same tone-color. This applies to the type of trio in which the melody appears above the harmony. When the melody appears below the harmony, then it is advisable to employ a Duplex or Composite tone-color in playing such melody. All this also applies to the Brass Unit.

Chapter XIX deals with the combining of the Saxophone, Brass and Rhythmic Units. Many interesting examples will be shown, accompanied by further explanations regarding color-relations.

CHAPTER XVI

THE RHYTHMIC UNIT

In previous chapters the fundamental principles of writing for the Piano, Violin, Basses, Tenor Banjo and Drums have been explained.

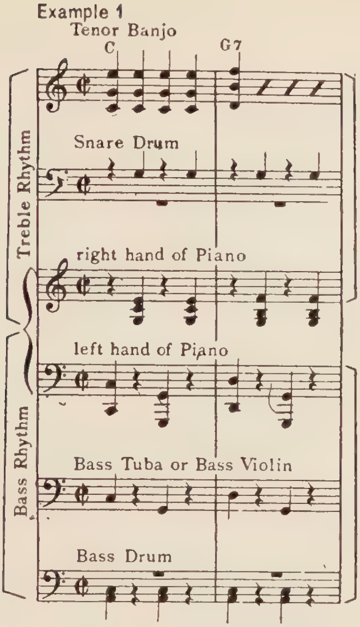
In this chapter the writing for these instruments as a combined unit will be dealt with. The Piano, Banjo, Bass and Drums form that part of a dance orchestra which creates rhythm, and for this reason this combination of instruments, from now on, will be called the "Rhythmic Unit."

This Rhythmic Unit performs the rhythms in all types of American Dance Music: Fox-Trot, Waltz, Tango, etc., and it is therefore necessary to combine the Rhythmic Unit with all these tempos. Owing to the fact that the Fox-Trot is the outstanding represenative of American Dance Music, this rhythm will be the one used in explanations and examples. After a thorough knowledge of how to write for the Rhythmic Unit in the Fox-Trot tempo is acquired, it will be an easy matter to apply such knowledge when writing in other tempos.

TREBLE AND BASS RHYTHM

Rhythmically, the Rhythmic-Unit is divided into two sections—viz.: *treble-rhythm* and *bass-rhythm*. The rhythm which is written for the right hand of the Piano, the Banjo and the Snare Drum represents the *treble-rhythm*, and the part which is written for the left hand of the Piano, the Basses and the Bass Drum represents the *bass-rhythm*.

The following example shows a rhythmic analysis of *treble* and *bass rhythms:*

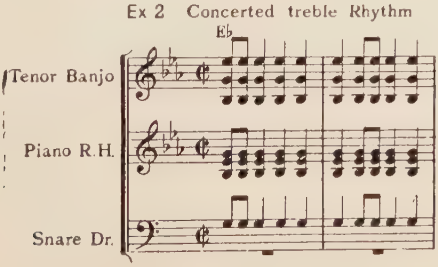


In the above example, note that in the *treble-rhythm* the Banjo part has four rhythmic beats to a measure; whereas, for the right hand of the Piano and the Snare Drum, only the after-beats are written. Also note that the rhythm, written for all the instruments of the bass-rhythm, is alike. The rhythm shown above is mostly employed when no other important rhythmic effect is desired. With this rhythm as a basis, more complicated rhythm can be invented.

The various rhythms shown for the right hand of the Piano part (Chapter II) can also be applied to the Banjo and Snare Drum.

CONCERTED RHYTHM

When all the instruments of the *treble-rhythm* are playing rhythmically alike, such playing is called "Concerted" rhythm.

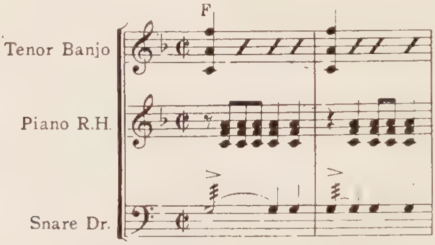


Concerted rhythm, as shown above, can be written freely, using any rhythm desired.

DISCONCERTED RHYTHM

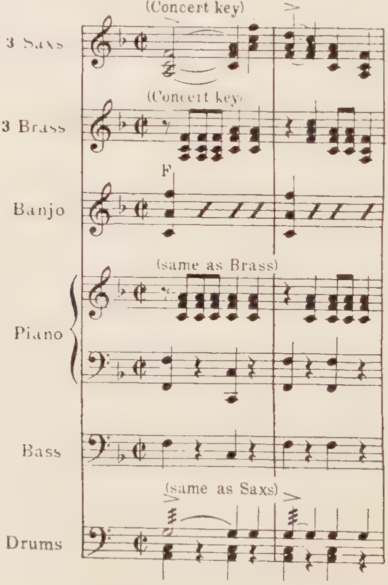
When the treble-rhythms are divided into two or three rhythms it is called "Disconcerted" rhythm.

Ex. 3 Disconcerted treble Rhythm



Note, in the above example, that three different rhythms are written. This is permissible, but usually when this liberty is exercised these different rhythms also appear for other instruments of the orchestra. To further explain this, the following example shows how the rhythm, written for the right hand of the Piano part, is a duplicate of the rhythm written for the Brass, while the Snare Drum rhythm is a duplicate of the Saxophone rhythm. In this instance the Banjo part is written four beats to a measure, so as to synchronize the entire rhythmic structure.

Ex. 4

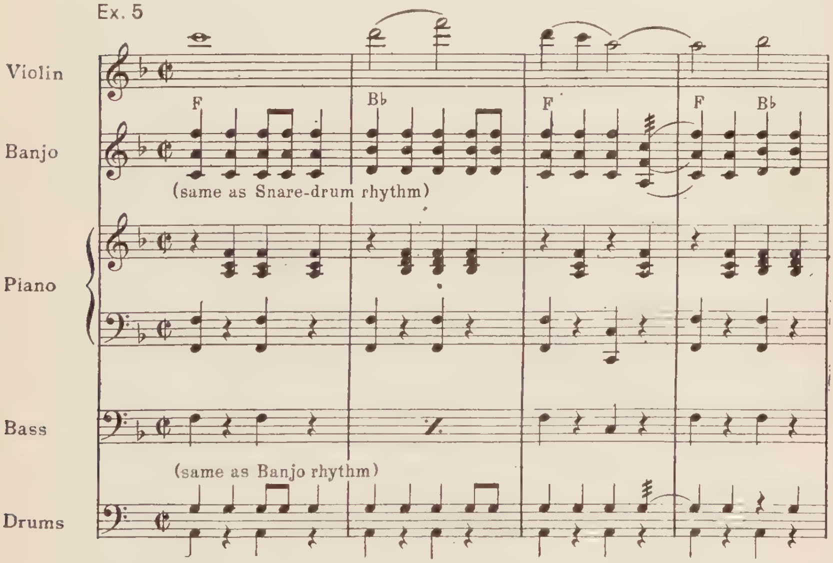


SELECTION OF RHYTHM

The rhythmic structure for an arrangement should not be selected until the melody has been thoroughly studied. It is important that the style of rhythm is suitable to the melody. This is a matter of taste, and therefore, before deciding on any particular rhythm, several rhythms should be tried.

When a composition with a slow-moving melody, which consists of notes of long duration is to be arranged, a rhythm of variety is appropriate. A *disconcerted-treble rhythm,* is suitable, especially when a solo melody of a quiet nature is to be arranged. A *concerted rhythm* would mar the color of the solo. The following example shows a melody for the Violin to which a *disconcerted rhythm* is written for the Rhythmic Unit.

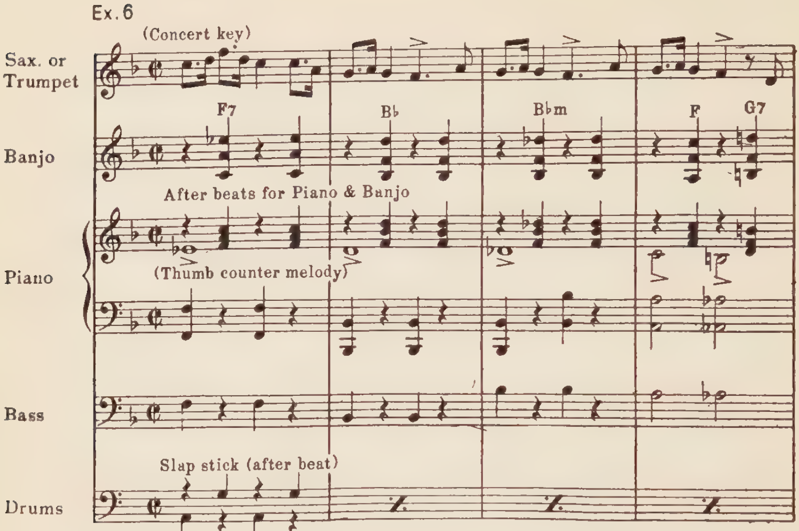
Ex. 5



The *disconcerted rhythm* shown above consists of only two different *treble-rhythms.* Should the above melody be written as a Saxophone Trio, the *disconcerted rhythm* would also be appropriate.

When a fast-moving melody is to be arranged, rhythms of a strict nature should be written for the Rhythmic Unit. The *concerted rhythm,* with very little variation, is practical. In conjunction with a "hot" Saxophone, Trumpet or Trombone solo, the *concerted after-beat rhythm* is suitable. The following example will explain the subject more clearly.

Ex. 6



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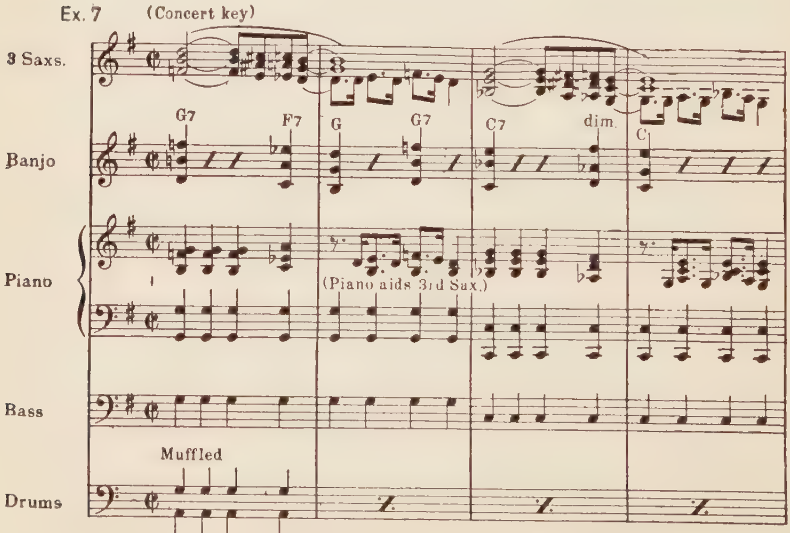
In a slow-moving Blues, the Rhythmic Unit is usually employed in concerted form, in which the bass-rhythm can be written four beats to a measure.

Ex. 7



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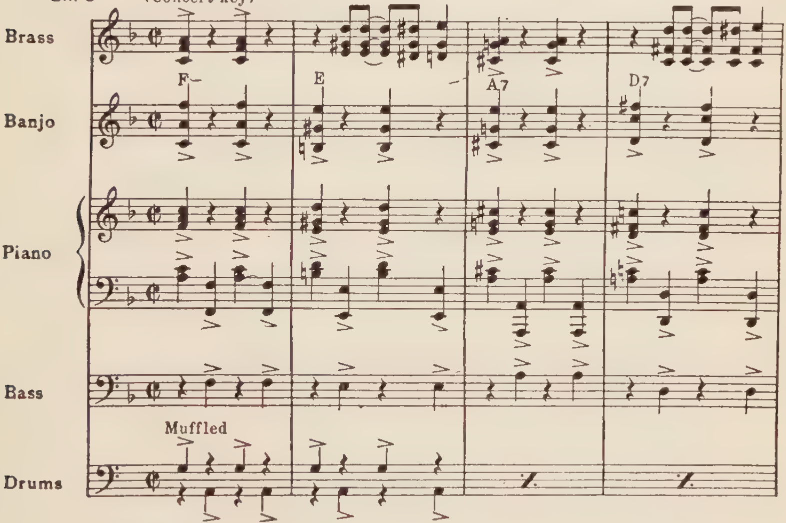
This style of rhythm has a tendency to become monotonous, therefore it is wise to vary the treble-rhythm frequently. The so-called "Back-Beat Rhythm," in which the *treble-rhythm* is written on the *first* and *third* beat, while the *bass-rhythm* is written on the *second* and *fourth* beat, is very odd and characteristic of the "Blues," especially when the melody is similar to the rhythm played by the *treble-rhythm* instruments.

Ex. 8



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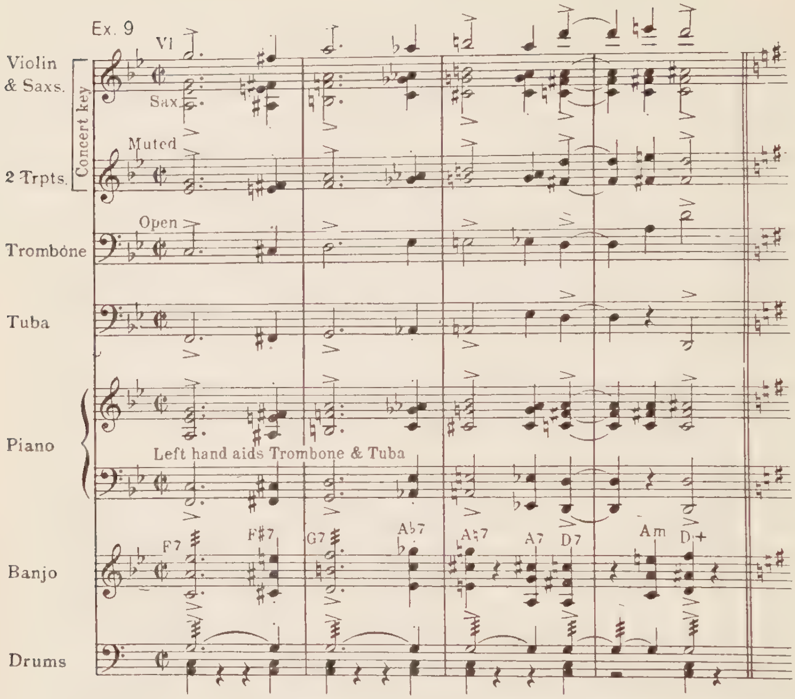
Rhythmic Unit in Modulations, etc.

As has been previously stated, the rhythm in dance music should never cease. This applies to the Rhythmic Unit, but there are instances when this ruling can be laid aside. A *modulation,* constructed on a melody which has its own definite rhythm, needs the support of the Rhythmic Unit in further accentuating such *modulation.*

Ex. 9



Although a common rhythm can be written for this modulation, it is more effective to write for the Rhythmic Unit, as shown in the above.

In some instances the construction of an introduction or modulation, permits the eliminating of the *bass-rhythm.* This is permissible, providing that the *treble-rhythm* is written in *concerted rhythm* form.

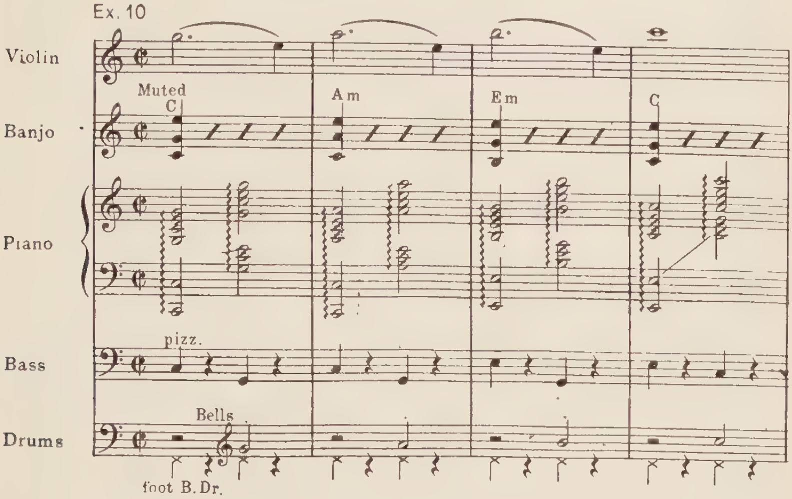
Rhythmic Color Effects

The selection of color, in writing for the Rhythmic Unit, depends greatly on the Drum part. In the previous chapter, which deals with Drums, Traps, etc., only a few effects were mentioned. The instruments of the "Color" and "Melodic" group are important factors in making rhythms colorful.

As already explained in the second chapter, the Piano may produce many colorful effects. When the Music Box, Chime, Arpeggio effect is to be written for the Piano, it is necessary for the balance of the Rhythmic Unit to preserve a strict rhythm. Strict rhythm does not mean heavy or loud playing. A strict rhythm can also be maintained in subdued playing. In keeping with the above-mentioned effects, such appropriate colors as Bells, Chimes, Vibraphone, Triangle or Wire Brush rhythm may be written in the Drum part.

In the following example is shown a Violin solo, to which a very colorful effect is written for the Rhythmic Unit.

Ex. 10



Note that in the Drum part the Bells are written so as to emphasize the Arpeggio effect written for the Piano. In some instances, when the Bell part is not too difficult, the Drummer can perform same in conjunction with the regular Drum part.

A momentary pause in rhythm is usually filled out by a single beat in the form of a Choke Cymbal, Bass Drum, Wood Block, or Chime beat, etc. The selection of color for a solo beat is a matter of choice. It is obvious that a Cymbal crash is not appropriate in a Violin solo, or in any other quietly rendered musical passage; neither is a Chime beat appropriate in a Syncopated composition.

It would not be possible to mention in this chapter all possible rhythmic and color effects of the Rhythmic Unit without dealing with subjects to be explained later. It is necessary to deal with the rhythmic and color relation of other instruments in the dance orchestra in order to explain the writing for the Rhythmic Unit more thoroughly. Therefore, the Rhythmic Unit will be frequently quoted in later chapters.

CHAPTER XVII

THE SAXOPHONE UNIT

The standard Saxophone Unit consists of three Saxophones. However, three Saxophones are not always employed. For this reason, the Saxophone Unit should be scored in such a manner, that when the 3rd Saxophone part is absent, the two most important parts will remain. This method of scoring is called the condensed Saxophone trio form, i.e:

1st Sax.—Melody or leading part.
2nd Sax.—Harmony of most importance, relative to 1st Saxophone.
3rd Sax.—Harmony of least importance, relative to 1st and 2nd Saxophones.

When arranging trios for the setting shown above, the perfect duet is assigned to the 1st and 2nd Saxophones. As already stated, a trio is created by adding another interval of the chord to a duet. In applying this rule to the condensed trio form, the third interval is assigned to the 3rd Saxophone.

SAXOPHONE COMBINATIONS.

The three positions of the condensed trio form, may be filled by any three Saxophones, but it is necessary to maintain a similar tone-color. The following are the most effective Saxophone Trio Combinations for the condensed trio form.

1st Sax.	Alto	Tenor	Alto	Soprano	Baritone
2nd Sax.	Tenor	Tenor	Alto	Soprano	Baritone
3rd Sax.	Alto	Tenor	Alto	Soprano	Baritone

1st Sax.	Baritone	Soprano	Soprano	Soprano	Tenor
2nd Sax.	Tenor	Tenor	Tenor	Soprano	Baritone
3rd Sax	Alto		Alto	Alto	Baritone

Of all the above combinations, the first shown is the fundamental one. When writing the Saxophone parts, they should be designated as follows:

1st Saxophone, E♭ Alto.
2nd Saxophone, B♭ Tenor.
3rd Saxophone, E♭ Alto.

In regard to the C Melody Saxophone, this instrument may replace either the B♭ Tenor, or the 3rd Saxophone, E♭ Alto.

In all orchestras, where two or three Saxophone players are employed, the Soprano, Baritone or other auxiliary instruments, are also played by one of the Saxophone Players. Therefore, any part to be played on such instruments, must be incorporated in one of the three fundamental Saxophone parts. When doing this, it is necessary to indicate over the part the instruments to be employed in the entire composition. For instance:

1st Saxophone, E♭ Alto, B♭ Soprano and E♭ Baritone.
2nd Saxophone, B♭ Tenor, and B♭ Soprano.
3rd Saxophone, E♭ Alto, and B♭ Soprano.

All deviations from the fundamental Saxophone Trio should be employed only when it is necessary to produce contrast, or when the playing range of the Alto or Tenor Saxophones are not capable of playing in the register of the effect desired. This applies to tone-color, as well as to pitch.

Constructing Saxophone Trios.

Saxophone Trios should be arranged in phrases of four measures. Each phrase should be perfected in detail before continuing with the next phrase. It is incorrect to write the complete melody for 1st Saxophone and then add the 2nd and 3rd Saxophone parts separately. By such a method, poor progression of harmony will result. The 2nd and 3rd Saxophone parts should be added simultaneously, and under all circumstances, in phrases of no more than four measures. The 2nd Saxophone, B♭ Tenor part should be the first to be added, so that a perfect duet exists between the 1st and 2nd Saxophones. The 3rd Sax., E♭ Alto, is then added to complete the harmonic triad in close harmony position. The 3rd Sax. note, in pitch, may be *between* the 1st and 2nd Saxophones, or *below* the 2nd Saxophone.

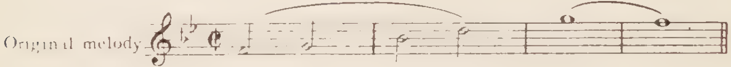
Theme Trios

In a Theme Trio, the melody must appear for one of the Saxophones. When applied to the fundamental Saxophone trio (2 Altos and Tenor), the melody should be assigned, preferably to the 1st Saxophone, E♭ Alto. To this, the harmony parts, assigned to the other two Saxophones, are added. In pitch, the melody is usually the highest, and the harmony notes are assigned to the 2nd and 3rd Saxophones, directly below the melody, in close harmony position. It is important that the melody be never hidden by the harmony note. Open harmony is sometimes effective and may be used occasionally.

SELECTING KEYS FOR SAXOPHONE SOLOS OR TRIOS

When writing Saxophone Trios, the selection of the proper key for the melody is essential. In assigning a melody, the playing range of the Saxophone to be employed, and the melodic range of the melody must be analyzed. The melody must then be transposed to a key best fitted to the playing range. For example:

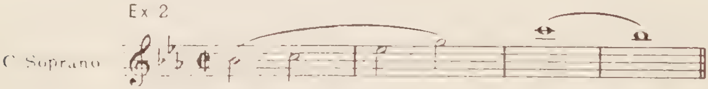
Example 1



(Rhythmic unit in Key of B♭)

The above shown melody, which is in the key of B♭, is to be assigned to a C Soprano Saxophone. It may be played on the instrument as shown above, but the natural brilliancy of that instrument is not brought out to full advantage in that key. For this reason the melody must be transposed to a higher key. In doing this, the key best fitted for the instrument must be selected. In this instance the key of E♭ is the one most suitable. The key of D is also suitable, but keys in "Flat" signatures are preferred to keys in "Sharp" signatures. The following example shows the above melody written for the C Soprano, and to accord with this, the trio is arranged in the same key.

Ex 2

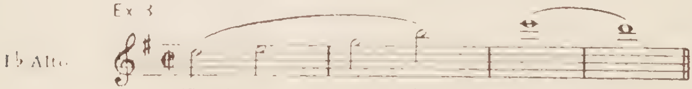


(Rhythmic unit in Key of E♭)

The same rule of selecting keys applies to melodies assigned to the E♭ Baritone Saxophone. For example:

The melody shown in Ex. 1 (in the key of B♭), is written for the E♭ Alto in the key of G, in the following way:

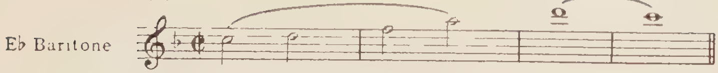
Ex 3



(Rhythmic unit in Key of B♭)

This key is suitable for the E♭ Alto, and may be retained when arranging a trio in which the melody is to be assigned to that instrument; but, if the same melody is to be assigned to the E♭ Baritone, the key shown above would be too high, and out of the playing range of that instrument. It could be played an octave lower, but in order to bring out the best tone qualities of the instrument, a different key should be selected. Again, the highest note of the melody and the practical playing range of the instrument must be analyzed. In this instance the key of F is suitable, as shown in the following example:

Ex. 4



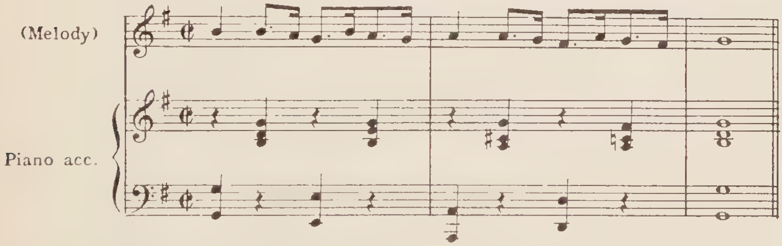
(Rhythmic unit in Key of A♭)

The above method of selecting keys should be applied at all times.

Adding the Rhythmic Unit to Saxophone Trios

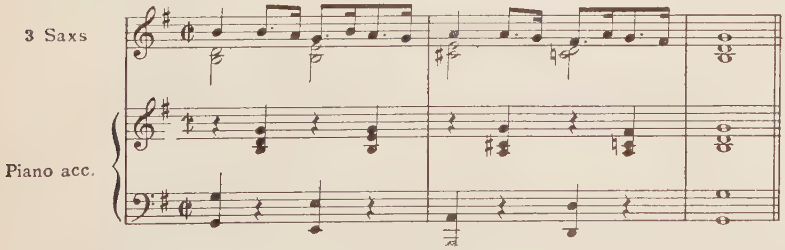
Before scoring the Rhythmic Unit, the Saxophone trio should be completed. When doing this, it may be necessary to slightly change the natural harmonic structure of the composition, so that an effective Saxophone Trio is obtained. The Rhythmic Unit, at all times, only acts as an accompaniment to a Saxophone trio, and therefore, when scoring, it should be added in accordance with the harmonic structure of the Saxophone Trio. All the above is clearly illustrated in the following examples. These are written in the concert key.

Ex. 5



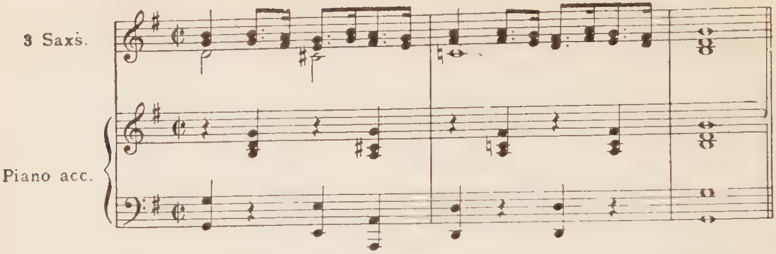
The above example is that of a melody, harmonized in the form of a Piano accompaniment. This melody is to be arranged in trio form, for three Saxophones. When doing this, the harmony suggested by the Piano accompaniment can only result in a trio as shown in the following example:

Ex. 6



The above trio and harmonization is not incorrect, but it lacks rhythm and an outstanding harmonic progression. To overcome this, it is necessary to change the harmony of the Piano accompaniment to such harmonization, which will bring about a better result. This is shown in the following example:

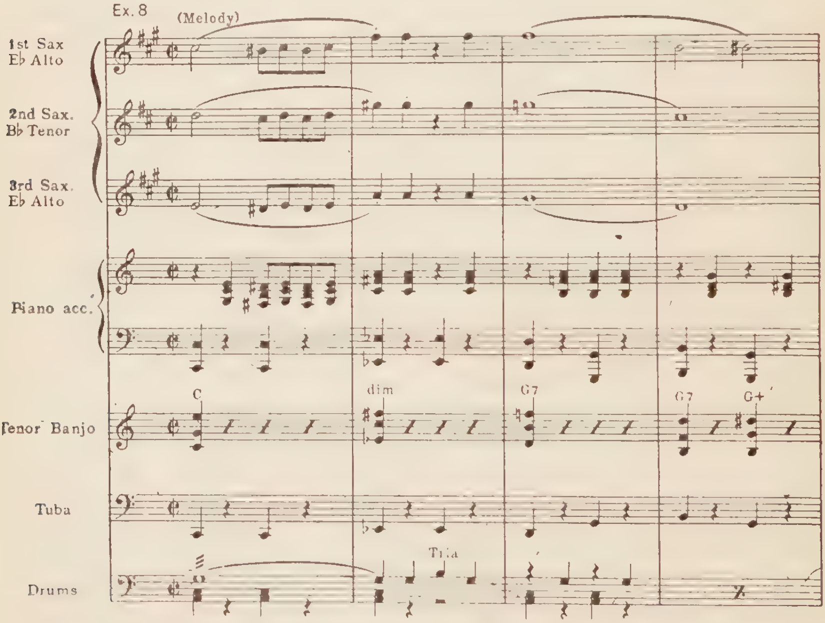
Ex. 7



The example shown above, is harmonically correct and at the same time definite in rhythm. Note, that two of the Saxophones move in thirds, whereas, the remaining Saxophone is assigned to harmony notes which move in semi-tone progression. This could not be accomplished if it were necessary to follow the harmonization shown in Exs. 5 and 6.

Saxophone Trios, if not properly arranged, sound muddy. It is always necessary to preserve a clean-cut harmonization, so that the harmony notes move in a definite rhythm. All this can be applied to *legato* as well as *staccato* trios.

Ex. 8

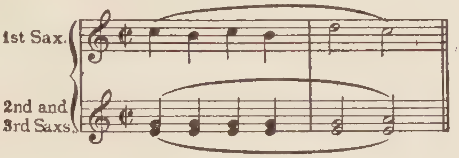


The above shown example illustrates what has been explained relative to clean-cut Saxophone trios.

Melodies of a *legato* nature are the most suitable to be assigned to Saxophone trios. When arranging such, every precaution must be exercised to ensure smooth progression of harmony. Each harmony part, especially the one assigned to the 2nd Saxophone, should resolve from one note to the other in the most pleasing manner.

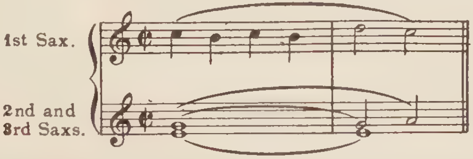
When a harmony part requires a repetition of the same note, it is advisable to write one note of time duration equal to the number of times the note is repeated.

Ex. 9



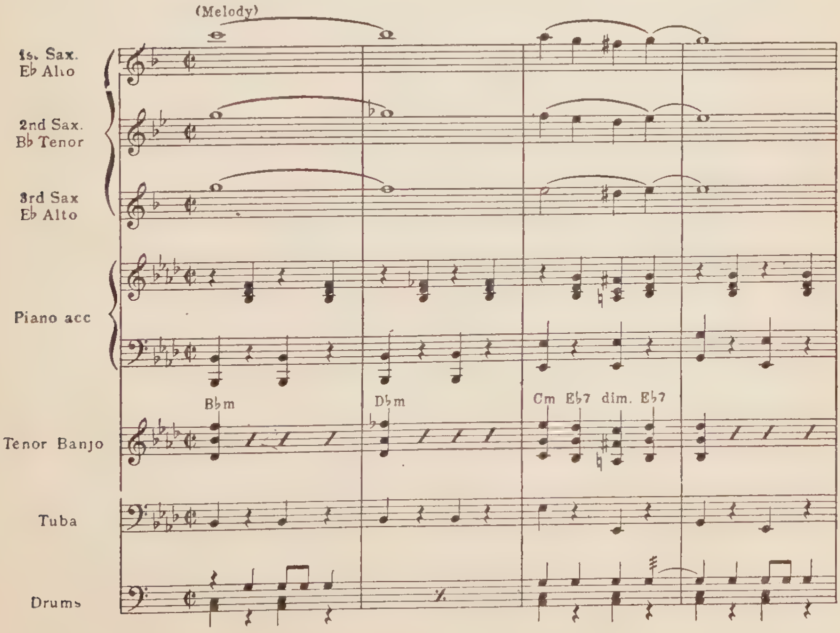
The above shown trio, intended for *legato* playing, is not written properly. To write the same note repeatedly, placing a *slur* over them, does not properly interpret the meaning intended. The following example shows the correct way of writing a *legato* trio, subject to the conditions mentioned above.

Ex. 10



The following example is a perfect model of a *legato* Saxophone Trio.

Ex. 11



The instruments employed are as follows:

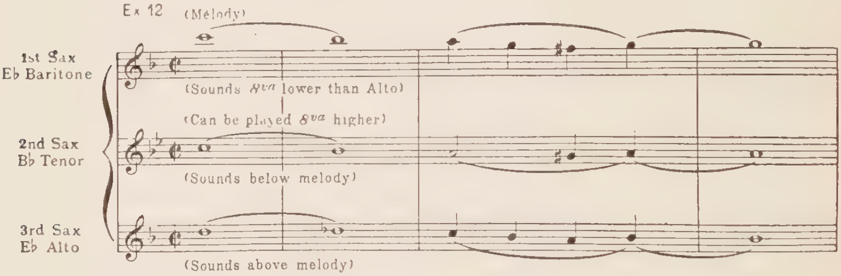
1st Sax.—E♭ Alto—Melody.
2nd Sax.—B♭ Tenor—Harmony.
3rd Sax.—E♭ Alto—Harmony.

If this trio is to be transcribed for the following instrumentation;

1st Sax.—E♭ Baritone—Melody.
2nd Sax.—B♭ Tenor—Harmony.
3rd Sax.—E♭ Alto—Harmony.

the three parts, in the score form, appear as follows:

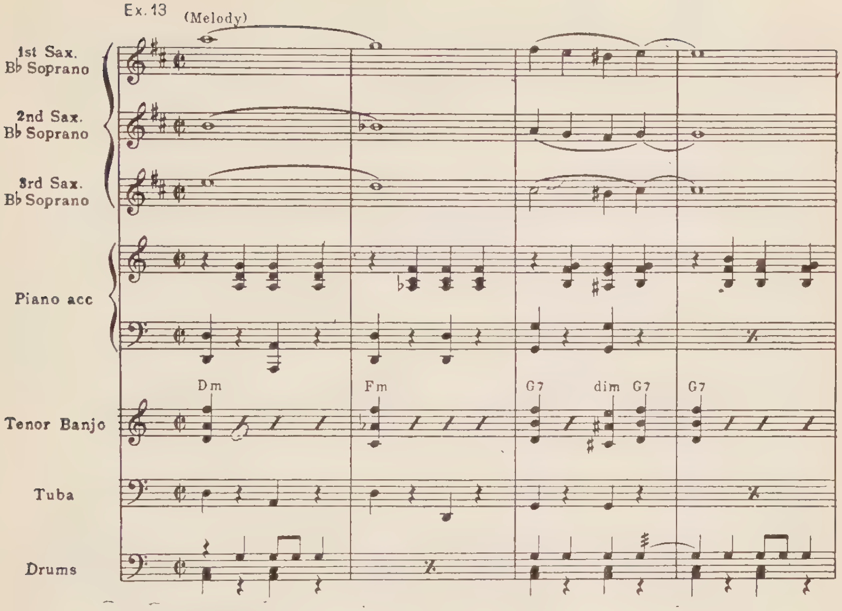
Ex 12



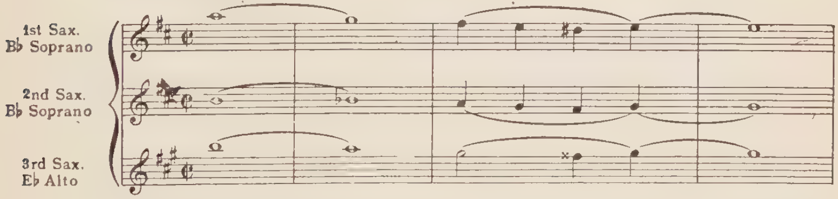
In this instance, the composition does not have to be transposed to a another key for the Baritone Saxophone, because the range of the melody is suitable to the instrument in the original key. Note that the melody written for the E♭ Baritone sounds an octave lower than the same notation sounds on the E♭ Alto. When these three parts are played as written, the melody will sound between the two harmony notes assigned to the 2nd and 3rd Saxophones. This is a beautiful effect when the 2nd and 3rd Saxophones play in a subdued manner, so that the melody can be clearly heard. Another form of playing this type of trio arrangement is by transposing the 2nd Sax., B♭ Tenor, an octave higher. By doing this, the melody will sound completely below both harmony parts. This is also a very effective trio. In transcribing the trio, shown in Ex. 11, for three Soprano Saxophones, it is necessary to transpose the melody to a key suitable for those instruments. This is illustrated in Ex. 13.

The instruments employed are three B♭ Soprano Saxophones. The distribution of the harmony is the same as that in Ex. 11. Trios for three Soprano Saxophones are confined to the Piercing tone-color. However, it is not always necessary to employ three Soprano Saxophones, an Alto or Tenor Saxophone can be assigned to a harmony part with a similar result. This is illustrated in examples 14, 15 and 16.

Ex. 13

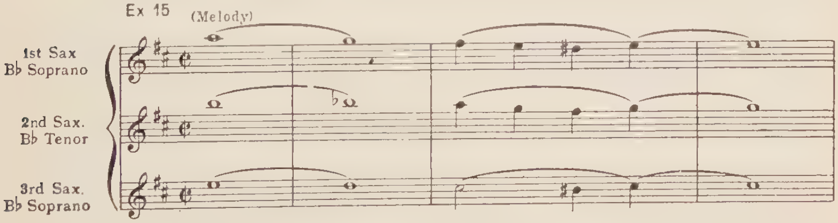


Ex 14

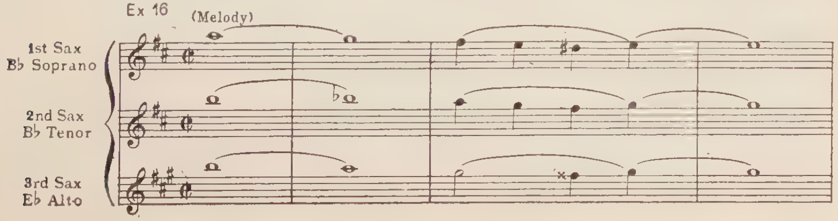


Although the 3rd Saxophone is in the Open tone-color, the influence of the Piercing tone-color is strong enough to overbalance it.

Ex 15



Ex 16

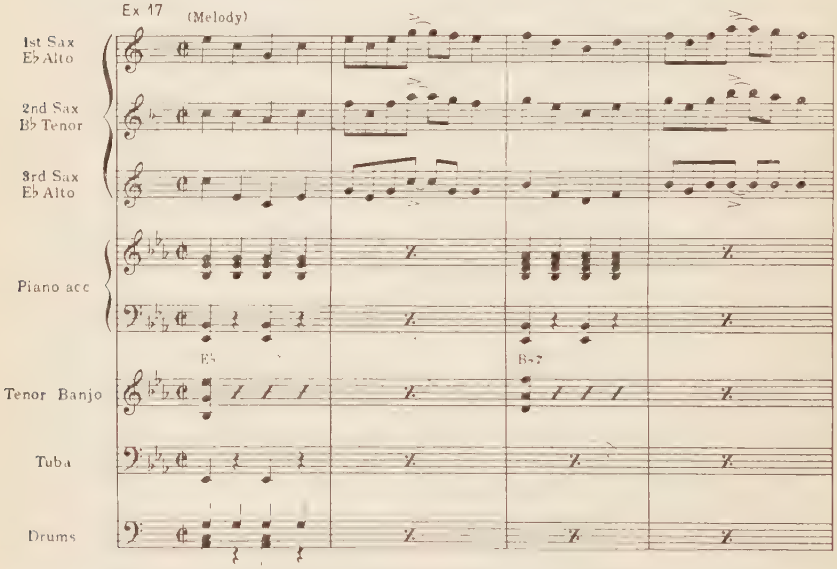


All that has been explained in connection with Ex. 14, in reference to Open tone-color of the 3rd Saxophone, also applies to Ex. 16. Although a different instrumentation is employed, note that the Saxophone Trio shown in Exs. 13, 14, 15 and 16, sound alike in pitch, harmony and tone-color. For this reason, their employment is a matter of choice.

Theme trios are not strictly confined to *legato* melodies. Syncopated or fast moving melodies may also be assigned to Saxophone Trios.

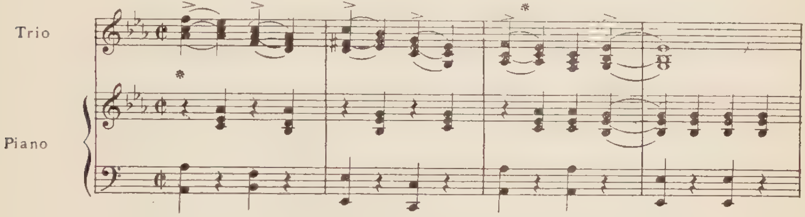
This kind of trio is most effective when written in concerted form. Dynamics are of great importance in bringing out the full effect of a syncopated Saxophone Trio. This is illustrated in the following example:

Ex 17



The above Saxophone Trio is written in strict concerted form. Note, the *staccato* phrasing and *accents* on the syncopated portion of the melody in the second and fourth measures. This example also illustrates the crossing of the 2nd and 3rd Saxophone parts, which occurs in the first two beats of the first measure. Throughout the entire four measures, the 2nd Saxophone, with the exception of the first note, is assigned to the harmony part nearest in pitch to the melody. This creates a perfect duet between the 1st and 2nd Saxophones. In this instance the 3rd Saxophone is lower in pitch than the 2nd Saxophone. A clean-cut effect can only be obtained by arranging such Saxophone Trios as illustrated above. In all trios of this nature, the rhythmic impression created is of vital importance. For this reason they should be the reverse, in style and manner, of *legato* trios. A harmony note, to be repeated, should be written rhythmically the same as the melody, and written as often as required. There are instances when this manner of arranging may be applied to Saxophone trios, *legato* in nature, and rhythmically important. This applies chiefly to trios not entirely *legato*. The following example shows such a trio which is to be arranged for three Saxophones:

Ex 18

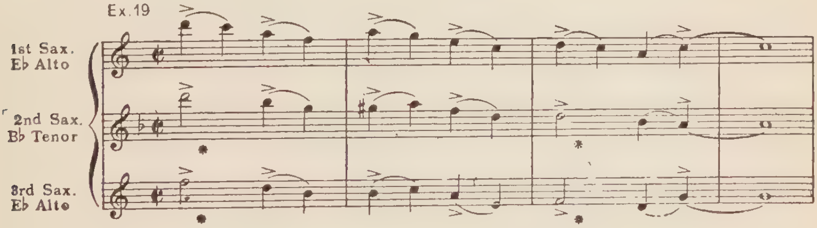


The Saxophones to be employed are as follows:

1st Sax.—E♭ Alto—Melody.
2nd Sax.—B♭ Tenor—Harmony.
3rd Sax.—E♭ Alto—Harmony.

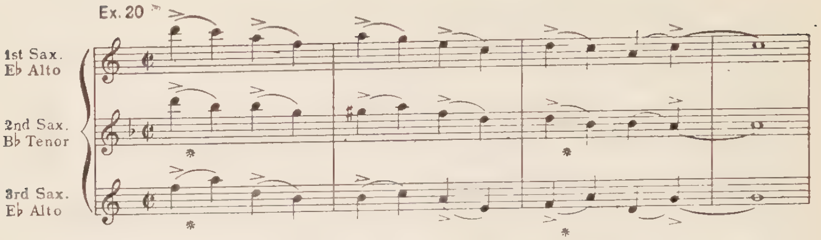
In accordance with the rules governing trio form in *legato* manner, the above trio should appear for the three Saxophones as shown in the following example:

Ex. 19



The notes indicated by a (*) in Ex. 19, represent the same notes indicated by a (*) in Ex. 18. Note, that the melody, in the first and third measures, moves; the harmony remains on one note for the duration of the two melody notes. Also note, that all other groups of two notes are not arranged in that manner. Instead, the harmony notes move simultaneously with the melody. In order to fully express the rhythmic character of this trio, the sustaining of the harmony notes in the first and third measures must be eliminated. This is done as shown in the following example.

Ex. 20



In the above example, the harmony notes designated by a (*) also move simultaneously with the melody, but in doing this they cross each other in pitch. This does not add more harmonic value to the trio, but adds considerably in emphasizing the rhythm, uniformly with the balance of the trio.

Counter-Theme Trios

All Saxophone trios do not include the melody of the composition. Saxophone trios may be written in the form of figurations, counter-melodies or in many other effective forms.

Counter-theme trios should never be written unless the melody appears for one or more other instruments, preferably Trumpet or Trombone. All rules governing the construction of theme trios, also govern counter-theme trios, with one exception. The harmonic structure of the composition governs the harmonic structure of a counter-theme trio. This applies mostly to arrangements in which the melody is to be played in its original form. However, if the melody is to be played in trick form, the harmonic structure of the Counter-theme trio, in conjunction with the Rhythmic Unit, may be radically changed during intervals in which the melody is silent. Counter-theme trios can only be further illustrated when combined with the Brass Unit; see Chapter 19, "Brass vs. Saxophones."

Inverted Condensed Theme Trios

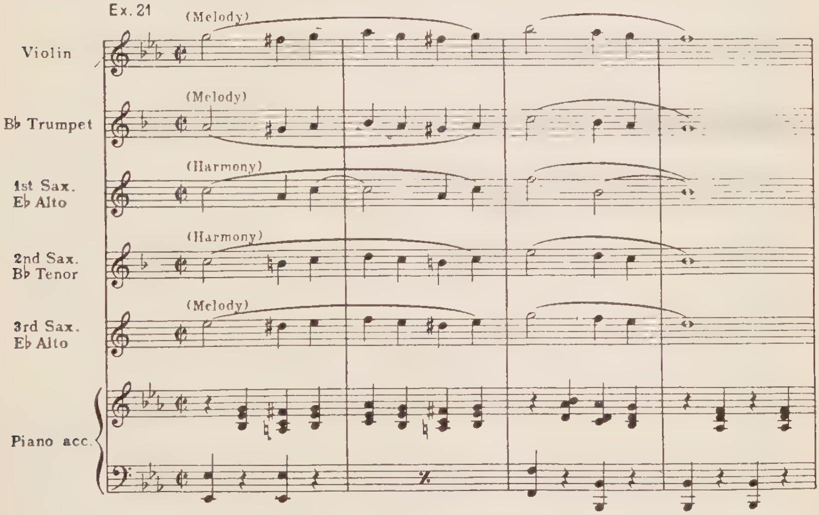
This form of Saxophone Trio applies to the fundamental instruments (2 Altos and Tenor), and is another version of condensing the important harmony parts of the Saxophone trio in such a manner that the harmonic structure of the composition is fully represented when the 3rd Saxophone is absent, and other instruments are doubled on the melody.

3rd Sax.—E♭ Alto—Melody.
2nd Sax.—B♭ Tenor—Harmony of most importance.
1st Sax.—E♭ Alto—Harmony of least importance.

3rd Sax.—E♭ Alto—Melody.
1st Sax.—E♭ Alto—Harmony of most importance.
2nd Sax.—B♭ Tenor—Harmony of least importance.

These forms of condensation necessitate the inversion of two or all three Saxophone parts. By doing so, an arrangement will be effective in small combinations. For instance: If a Violin, Trumpet or both are also assigned to the melody, the inverting of the Saxophone parts will create a three part harmony effect between the 1st Sax., 2nd Sax. and Trumpet or Violin, as illustrated in Ex. 21.

Ex. 21



If a third Saxophone part is eliminated, the harmonic structure of the composition is still complete.

Disconcerted Saxophone Trios

This form of Saxophone Trio consists of two independent parts. The melody is assigned to one of the Saxophones, whereas a duet form of counter-theme is assigned to the two remaining Saxophones:

1st Sax.—Melody.
2nd Sax.—Counter-theme.
3rd Sax.—Duet of counter-theme.

This form can also be condensed so that a perfect duet of melody and counter theme remains when eliminating the 3rd Saxophone. In assigning Saxophones to this form of trio, the tone-color values of the instruments must be considered. The melody should be in a tone-color, different from that of the counter theme. The following are forms of assignment:

1st Sax.—E♭ Alto—Melody.
2nd Sax.—B♭ Tenor—Counter-theme.
3rd Sax.—E♭ Alto—Counter-theme.

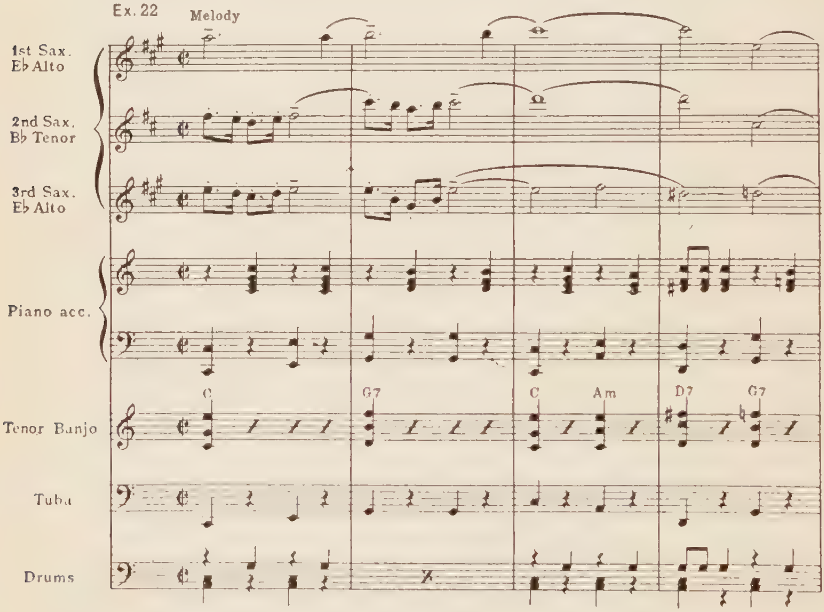
1st Sax.—E♭ Baritone or E♭ Alto (Low register)—Melody.
2nd Sax.—B♭ Soprano—Counter-theme.
3rd Sax.—B♭ Soprano—Counter-theme.

1st Sax.—E♭ Alto—Counter Theme.
2nd Sax.—B♭ Tenor—Melody.
3rd Sax.—E♭ Alto—Counter-theme.

1st Sax.—Soprano—Melody.
2nd Sax.—Tenor or Alto—Counter-theme Solo.
3rd Sax.—Alto—Duet with melody.

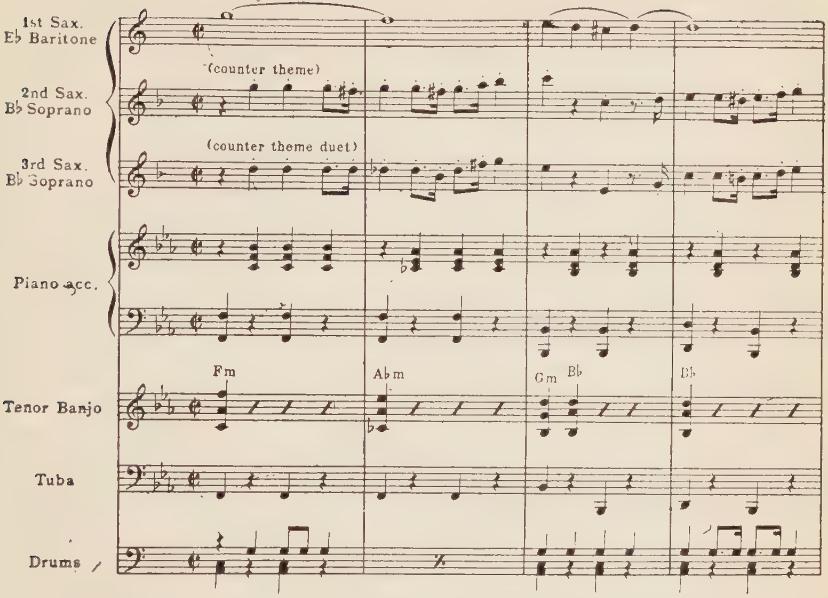
Many other forms may be constructed. However, it is necessary that at all times, a contrast in tone-color be established between the melody and counter-theme. The following examples illustrate the above forms.

Ex. 22



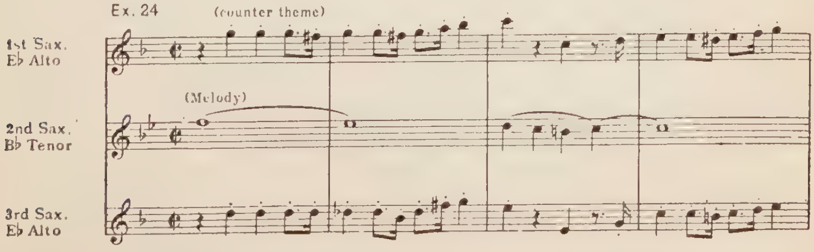
The above example shows the most common form of disconcerted Saxophone trio as applied to the fundamental instrumentation. Note, that the 2nd and 3rd Saxophones cross each other in pitch, so that the melody of the counter-theme appears in the 2nd Saxophone part. The following example is a disconcerted Saxophone Trio version of the same melody shown in Exs. 11, 12, 13, 14, 15 and 16.

Ex. 23



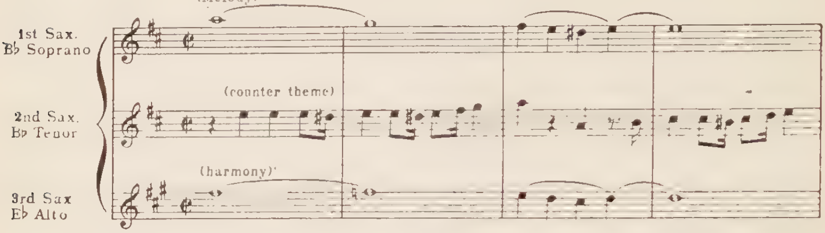
This trio is that of a Baritone Solo, to which a counter-theme duet written for two B♭ Soprano Saxophones is added. In Ex. 12, a transposition to another key was not necessary, but in Ex. 23 a change in key must be made so that the two Soprano Saxophones will be in their most effective playing register. In this instance, the key of E♭ is the most effective and does not place the Baritone Solo in a poor playing register. Note, that in the third measure, the harmonic structure of the composition, shown in Ex. 11, is slightly changed so as to allow the rhythmic figuration for the B♭ Soprano Saxophones, in Ex. 23, more freedom. The following is that of the same melody and counter-theme shown in Ex. 23, as applied to other Saxophones.

Ex. 24



The original key, as shown in Ex. 11, is appropriate for this trio. The following example is that of another version of the same melody and counter-theme. However, in this instance, the *melody,* instead of the *counter*-theme, is harmonized.

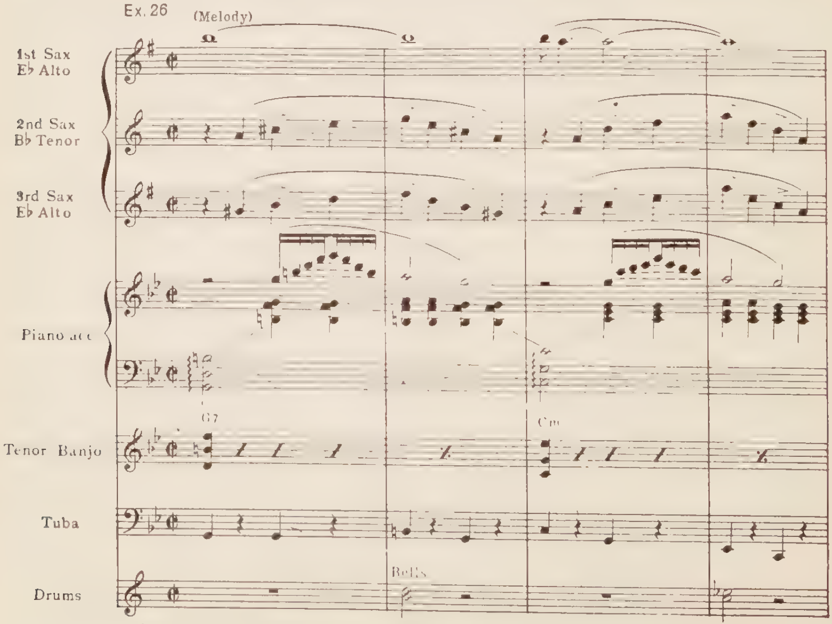
Ex. 25



In the above example, the melody is assigned to the 1st Sax. B♭ Soprano, and the counter-theme is assigned to the 2nd Sax. B♭ Tenor. In pitch, these two parts are separated in intervals of an octave or more. This duet may remain, and still be effective without adding the 3rd Saxophone, but, if such addition is necessary, it is advisable to fill in the large interval existing between the 1st and 2nd Saxophones with harmony notes different from those played by the 2nd Saxophone, and also rhythmically the same as the melody.

In many instances disconcerted Saxophone trios are preferred. This occurs when compositions or effects require the assistance of one or more instruments of the Rhythmic Unit for execution. In such instances

Ex. 26



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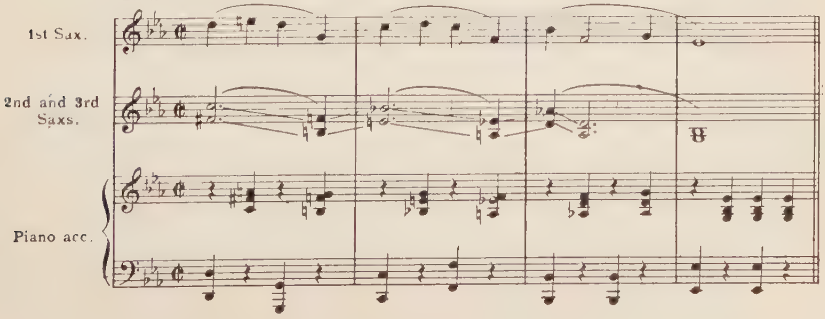
the 2nd and 3rd Saxophones are most effectively assigned to counter-themes, which supply harmonic rhythm as a substitute for missing instruments of the Rhythmic Unit. This is clearly illustrated in Ex. 26.

In the above example, the melody is assigned to the 1st Sax., E♭ Alto. To this the Rhythmic Unit is added in a very colorful maner. The Piano accompaniment is in the form of a "rippling water" effect, for the right hand, assisted by rhythmic beats for the left hand, and an occasional bass *arpeggio.* The Tuba and Tenor Banjo are assigned to common rhythm, and the Drums are entirely eliminated for the purpose of producing bell effects. The rhythm created by the Rhythmic Unit in this score is sufficient if only to accompany a Saxophone solo, but if the 2nd and 3rd Saxophone parts are to be employed in a concerted harmony trio form with the 1st Saxophone, the volume and sonority of such would slightly obscure the rhythm. Therefore, in adding the 2nd and 3rd Saxophones, it should be done in a rhythmic manner as shown in Ex. 26. Note, the accentuation of the important rhythmic beats of the measure, and also the harmonic value of the notation.

HARMONIC PROGRESSIONS

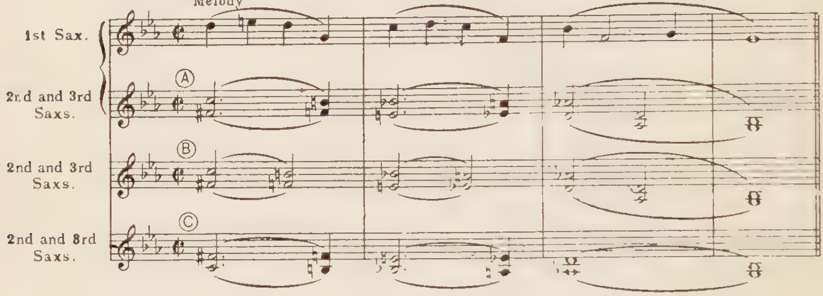
Harmonic progressions are very important, inasmuch as they can either ruin or beautify a Saxophone trio. As already stated, the harmony notes, assigned to the 2nd and 3rd Saxophones, should resolve naturally from one note to another. It has also been shown that the melody of a Saxophone trio is the most important part, and should never be hidden by harmony notes. This sometimes leads into complications, especially when the melody continually moves up and down. In order to adhere to the rules set heretofore, the 2nd and 3rd Saxophone parts should also move parallel with the melody and join the 1st Saxophone in its movements. However, this will necessitate the writing of poor harmonic progressions. This is illustrated in the following example:

Ex 27



Note, that in example 27, the 2nd and 3rd Saxophones are continually moving up and down in their progression of harmony and at the same time, in a harmonic sense, do not resolve naturally. This should always be avoided, and can be done in several ways, as illustrated in the following:

Ex. 28

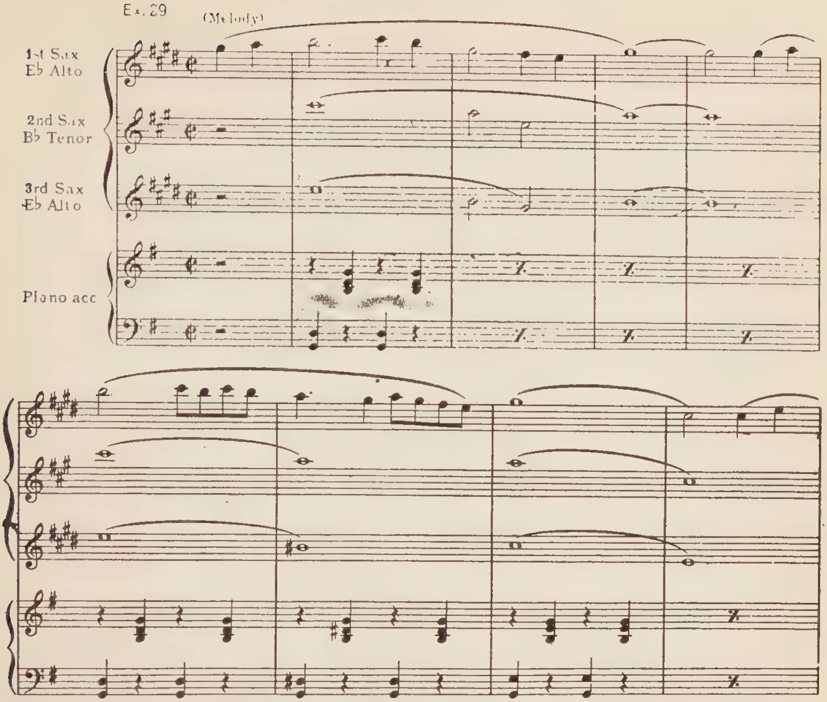


The 2nd and 3rd Saxophones can be written as shown on staff A, but the melody note would be covered on the fourth beat of the 1st and 2nd measures by the harmony note of the 2nd Saxophone, which sounds above the 1st Saxophone note. However, this progression of harmony is to be preferred, and can be written as shown on Staff B. By this method, the harmony notes sound on the third beat of the 1st and second measures. This will allow the melody, played by the 1st Saxophone, to be clearly heard descending to the note sounding between the 2nd and 3rd Saxophones. This is caused by the fact that the melody *moves* and the harmony *does not.* The 2nd and 3rd Saxophone parts may also be written as shown on Staff C, but this method would necessitate the writing of open position harmony. This is a matter of choice; either B or C is correct.

Open Position Harmony.

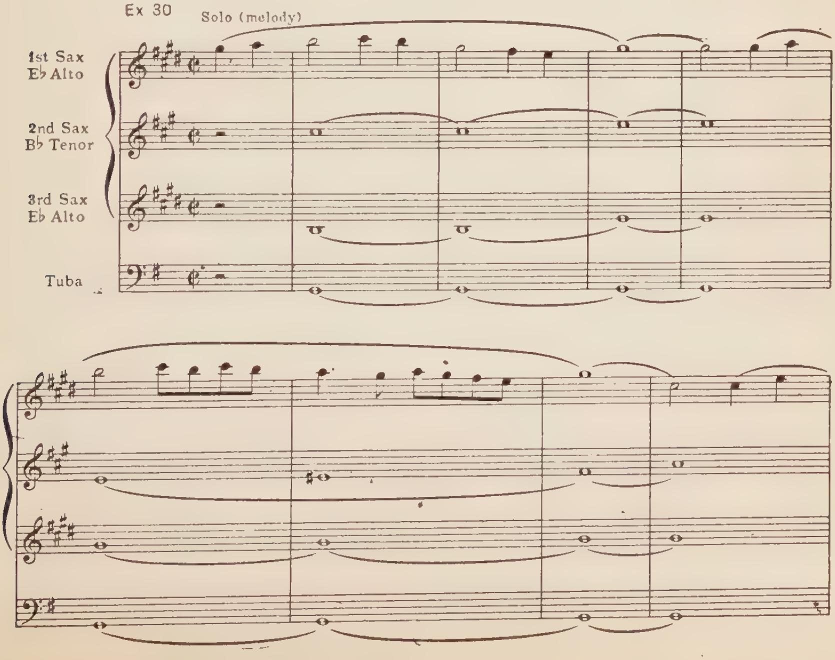
Open position harmony is very effective and may be utilized to good advantage. One illustration is all that is necessary to explain this. Very often a melody which is not effective as a Saxophone trio in close harmony position will become so, if transcribed to open position harmony. The following example is that of a close harmony position trio, the theme of which is an excerpt from the Rhythmic Paraphrase "Fantasie Orientale."

Ex. 29

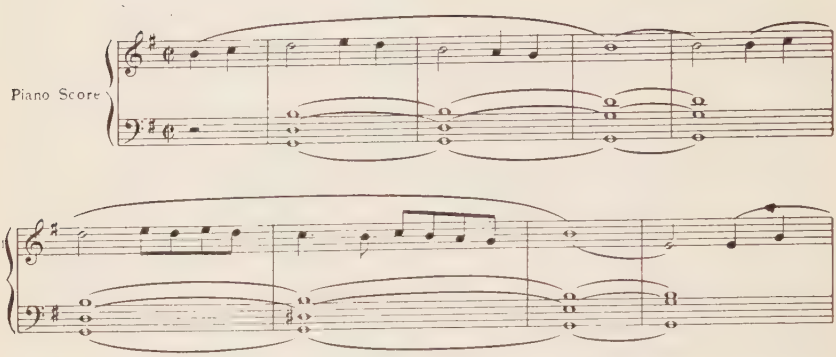


This trio is not poor, but is weak in expression, and, therefore, has been transcribed to open position harmony. In doing this, the Tuba plays an important part.

Ex 30



Ex. 30 sounds as follows:



Ex. 30, on page 115, is a perfect illustration of open position harmony as applied to three Saxophones and Tuba. The Saxophone, carries the melody independent of the harmony; the 2nd and 3rd Saxophones and Tuba sustain the harmony of the composition in three part harmony, in open position. In adding the Rhythmic Unit, the rhythm must be clearly defined by the remaining instruments, Piano, Banjo and Drums. However, the Tuba may also be assigned to rhythm; but in doing this, it is essential that only *G* appears as a bass note for the Tuba and left hand of the Piano part.

RESUMÉ

All that has been explained and illustrated above does not constitute all of the possibilities. The Saxophone Unit may, in some instances, be divided so as to emphasize other important musical passages of the composition which are already assigned to other instruments. Important bass passages may be reinforced by adding the E♭ Baritone Saxophone. The three fundamental Saxophones may also be written in unison so as to broadly emphasize a melody or counter-melody. Three Baritones or three Soprano Saxophones may be employed in the same manner.

When writing Saxophone parts, ideas conceived and to be applied should be thoroughly analyzed before scoring. All that has been said relative to Saxophones is based on practical knowledge, the rules of which must be adhered to in general if the best results are to be obtained.

CHAPTER XVIII

THE BRASS UNIT

The Trumpet and Trombone are present in nearly every dance orchestra. In small combinations, it has sometimes been found effective to use only one Brass instrument, viz., one Trumpet.

In this treatise, only two or more Brass instruments will be dealt with. Any combination of Brass instruments from now on will be called a "Brass Unit."

BRASS DUETS

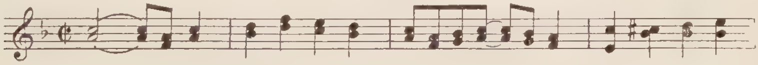
The duet form will now be applied to the various Brass instruments. The first one to deal with is the Trumpet duet.

The harmonic structure and style of duet to be written greatly depends on the character of the melody or the style of interpretation desired.

CONCERTED AND SEMI-CONCERTED TRUMPET DUETS

For rhythmic melodies, in which Syncopation, quarter notes and eighth notes appear, the concerted duet is most appropriate.

Example 1

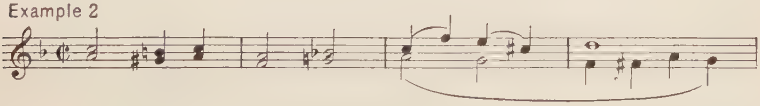


The interval between the two Trumpet notes should be confined to *seconds, thirds* and *sixths* as much as possible. Intervals of *perfect fourths perfect fifths* and *sevenths* should be written only when unavoidable, and at such time should not be associated with notes of long duration.

The duet shown above may be played either "Open" or "Muted," but it is essential that both Trumpets be alike. The use of the "Hat" or "Wa-Wa" mutes will add color and character.

Smooth melodies, in which notes of long duration appear, are usually rendered in a *legato* manner. Therefore, it is necessary to write in such notation. A duet of this kind may be written in concerted or semi-concerted form.

Example 2



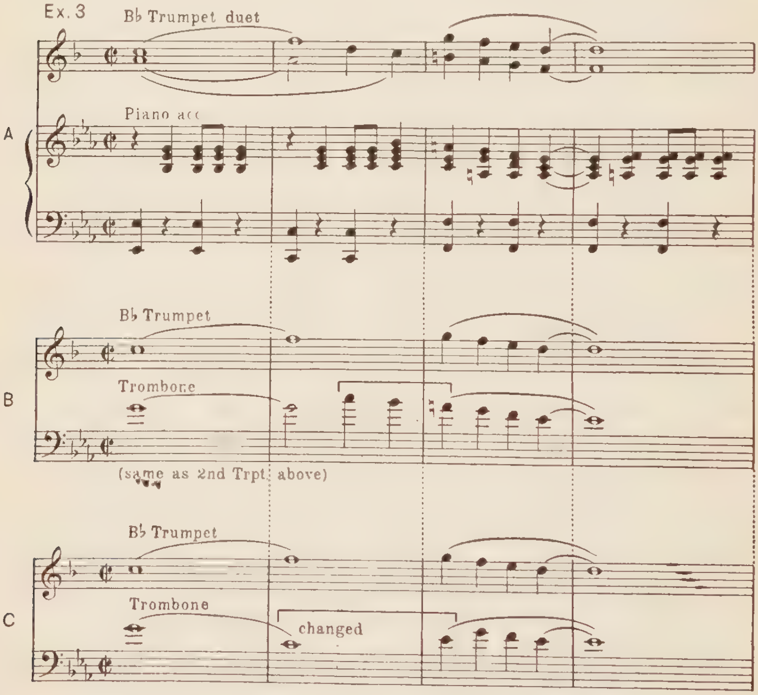
This duet may be played "Open" or "Muted." When a Mute effect is desired, the proper muting is important so that the smooth character of the melody is not marred.

Trumpet and Trombone Duets

In combinations where only two brass instruments are present, brass duets are confined to the Trumpet and Trombone.

A Trumpet duet may be transformed to a Trumpet and Trombone duet. This is done by transcribing the second Trumpet part for the Trombone. In some instances the playing range of the Trombone does not allow the writing of certain notes. This occurs when the second Trumpet part is written in a high register. To overcome this difficulty, the next note of the chord below that note which is written for the second Trumpet, should be written for the Trombone.

Ex. 3



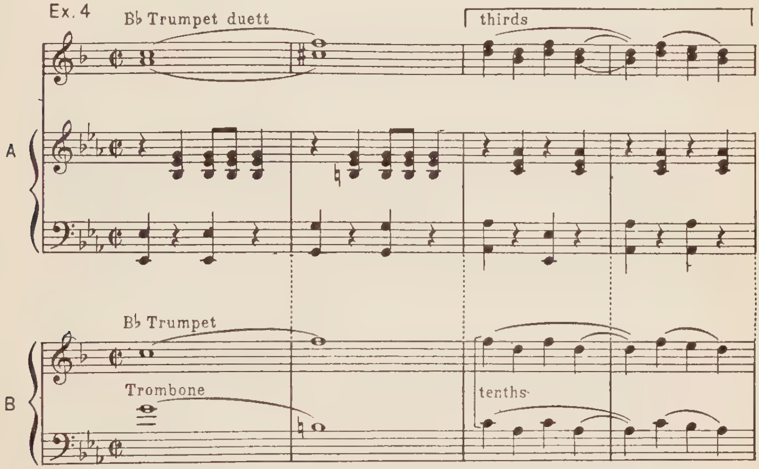
The first example A, shows a Trumpet duet which is to be transformed to a Trumpet and Trombone duet.

Example B, shows the second Trumpet part transcribed for the Trombone. Note that some of the Trombone notes are written above the practical playing range of the instrument.

Example C, shows how this is overcome when writing duets for the Trumpet and Trombone.

When a duet which consists of many *thirds* is to be transformed to a Trumpet and Trombone duet, the *thirds* should be retained as much as possible. However, if the second part appears above the practical playing range of the Trombone, the effect of *thirds* can still be retained by writing the second Trumpet part an octave lower for the Trombone, thereby creating an interval of a *tenth*. The Trombone will then sound an *octave* and a *third* below the melody.

Ex. 4



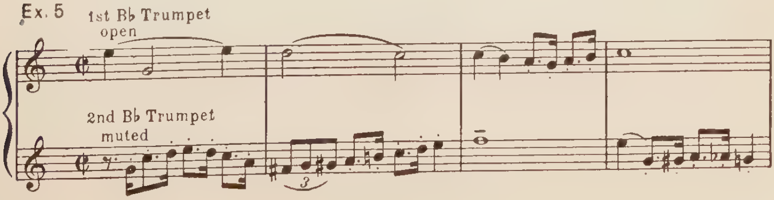
Example A, shows a Trumpet duet written in *thirds,* which is to be transformed into a Trumpet and Trombone duet; the second Trumpet part is written in a high register.

Example B, shows example A written as a Trumpet and Trombone duet in which the Trombone part is written in *tenths* with the Trumpet.

COUNTER DUETS

When the counter-duet form is applied to a Trumpet duet, the second Trumpet part may be written above or below the first part in an alternating manner.

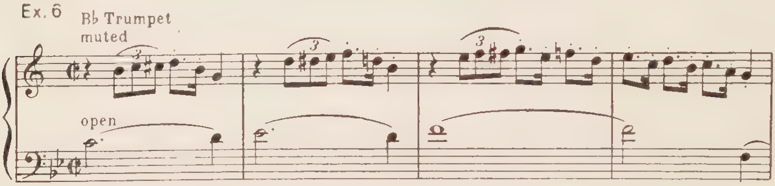
Ex. 5



The counter-duet shown above, would not be effective if both Trumpets were "Open" or "Muted" alike. Therefore, one of the two should be muted, preferably the second Trumpet, while the first Trumpet remains "Open."

When writing counter-duets for Trumpet and Trombone, the melody may appear for either of these two instruments, but the second part cannot cross from above to below the first part. The following example shows a melody written for the Trombone to which a counter-melody is written for the Trumpet.

Ex. 6



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In this case it is necessary that the melody played by the Trombone be not covered by the tone-color of the Trumpet. Therefore, the Trombone should be "Open" or similar, and the Trumpet should be "Muted." If the Trombone were "Muted," and the Trumpet "Open," the melody would be obscured.

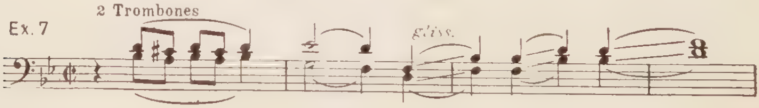
The counter duet for these two instruments may also be written in the form of a melody for the Trumpet, and a counter-melody for the Trombone.

In such duets the tone-color for the two instruments is a matter of choice. The Trumpet, which plays the melody, is written above the Trombone, and the latter is so far removed from the Trumpet that its tone-color will not cover the melody.

TROMBONE DUETS

Trombone duets should be mentioned as practical, allowable, and especially effective when the *glissando* effect is applied. The harmonic structure should be confined to *thirds* and *sixths* as much as possible.

Ex. 7



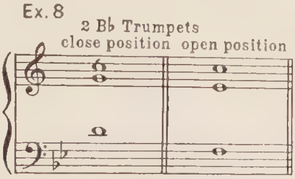
BRASS TRIOS

A Brass Unit of three usually consists of two Trumpets and one Trombone.

When a third note of the chord is added to an already constructed Brass duet, it forms a Brass trio.

The harmonic structure may be written in *close* or *open* harmony, i. e.,

Ex. 8

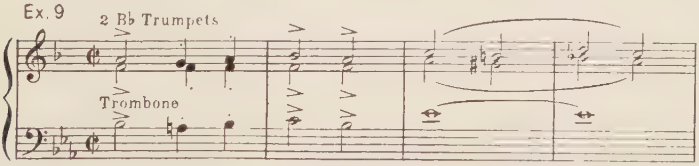


The concerted, semi-concerted, counter and inverted trio forms can be applied to the Brass trio. These forms can be better explained by illustration than by explanation.

CONCERTED TRIOS

The first example to be shown is that of a Brass trio written in concerted form:

Ex. 9

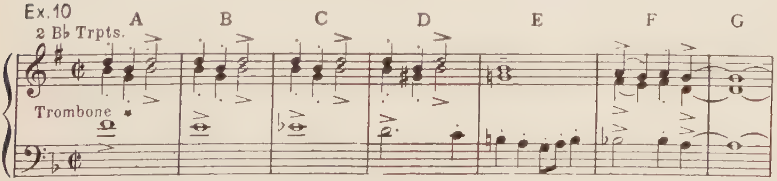


The harmonic structure is in *close* position. The rhythmic structure of the first two measures is of a *staccato* nature. Therefore, the second Trumpet part is written in the same rhythm as the first Trumpet and Trombone parts, making it necessary to repeat the same note as many times as there are melody notes. The last two measures are of a *legato* nature, in which the phrasing is indicated by *slurs*. In the Trombone part of these last two measures, the E♭ is *tied* over for a duration of two measures. This creates a *slurred* effect similar to that written for the Trumpets.

SEMI-CONCERTED BRASS TRIOS

The following example is that of a semi-concerted Brass trio:

Ex. 10



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The harmonic structure is in *close* position. In measures A, B, and C, the rhythm of the Trumpets is alike, whereas the rhythmic value of the Trombone part is confined to one note to a measure. This is done so as to emphasize the harmonic structure of the composition.

In measure A, the second Trumpet note marked by (*) doubles with the Trombone. This is permissable because it preserves the duet in *thirds* with the first Trumpet.

In measure D, a note for the Trombone appears on the fourth beat of the measure, which leads down by a *semi-tone* to the first note of the next measure. This note adds another rhythmic beat to the measure.

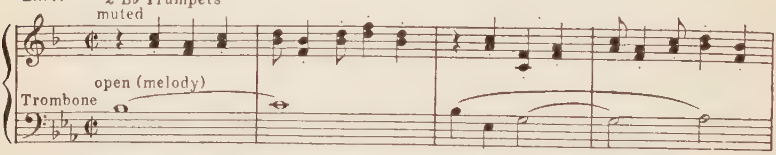
In measure E, the second Trumpet notes are sustained for a full measure, while the Trombone plays a *staccato* figuration, thereby creating a rhythm which fills out the measure.

In the next measure F, the first two *quarter* beats are written *legato,* the third beat *staccato,* and the fourth beat *accented* in concerted form, which *ties* over to the next measure G, thereby creating a syncopated rhythm.

Counter Trios

The following example shows a form of counter-trio:

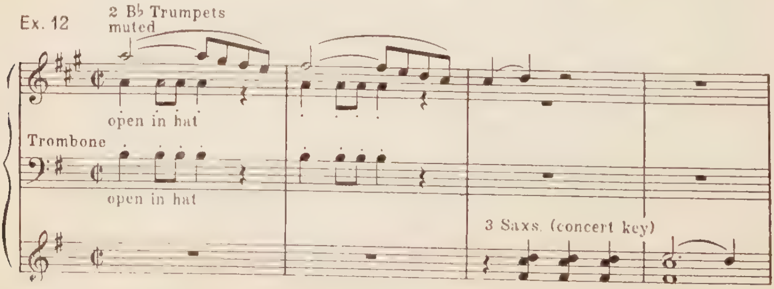
Ex. 11



The harmonic structure is that of a duet in *thirds* and *fourths* for two Trumpets, in the form of a figuration, to be played in conjunction with a *solo* played by the Trombone. The *solo* for the Trombone is *legato,* whereas the figuration for the Trumpets is *staccato.*

The following example is another form of counter trio, which is an extract from the Rhythmic Paraphrase, "Il Trovatore":

Ex. 12

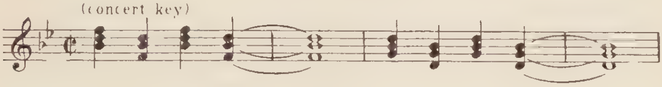


The effect in Ex. 12 is that of a *legato* Trumpet *solo,* to which a *staccato* rhythm is written for the second Trumpet and Trombone.

OPEN POSITION

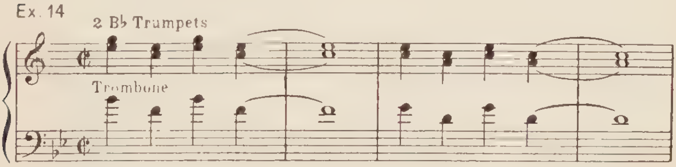
An *open* position trio should be written when the playing range of the Trombone does not allow *close* position writing. The following example is a *close* position trio, which is to be scored for two Trumpets and one Trombone.

Ex. 13



If this trio is distributed to these Brass instruments in its present form, the Trombone part would have to be written very high.

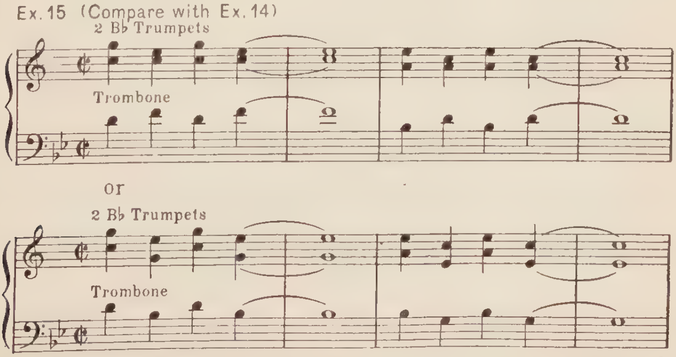
Ex. 14



In such instances the second Trumpet and Trombone parts are inverted, so that the second Trumpet plays the original Trombone part, and the Trombone plays the original second Trumpet part, an octave lower. *Open* position writing may be resorted to at any time during the course of a *close* position trio. Alternating from *close* to *open* position is more effective than forcing high tones from the Trombone.

The following example will illustrate more clearly how to alternate from *close* to *open* position.

Ex. 15 (Compare with Ex. 14)



Brass figurations, such as are used for rhythmic purposes should be confined mostly to concerted form. Alternating from *open* to *close* position is permissible.

The above are the fundamental principles of Brass trio writing. Many more forms present themselves as the opportunity arises, and they can be written without fear of bad result if the above rules are adhered to in a general way.

In later chapters, viz.: "Brass vs. Saxophones" and "Ensembles," more definite instructions will be given relative to Brass duets, trios, rhythms, figurations and color effects.

CHAPTER XIX.

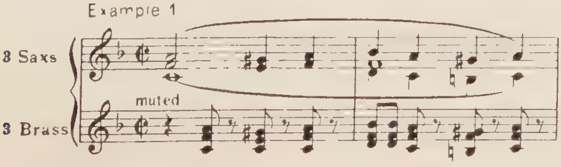
BRASS UNIT vs. SAXOPHONE UNIT

ASSISTED BY THE RHYTHMIC UNIT

In Chapter XV, the relative tone color values between the Brass and the Saxophone Units were set forth. In this chapter these two Units and their color-relations will be dealt with in a combined form. At this point all that has been previously taught will begin to take the form of an actual arrangement. Attempts at scoring should now be made, and if possible should be heard played by an orchestra. Under such conditions the actual result of thought written on paper can be more closely studied. It must be remembered that the written music acts only as a medium between the composer and the player. If the result of a score is not satisfactory, it may be the fault of the notation or rendition, just as much as it may be the fault of the thought. When a musical thought is first conceived, it should be thoroughly fixed in the mind before writing it down. The correct key harmony, phrasing and color effect is necessary to bring about a satisfactory result.

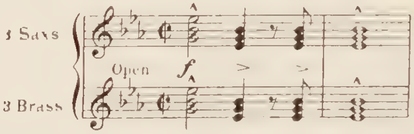
In this chapter the Saxophone Unit consists of three Saxophones in condensed form—viz., 1st Sax. E♭ Alto, 2nd Sax. B♭ Tenor, and 3rd Sax. E♭ Alto. As explained in the chapter "Saxophone Units," this formation acts as a successful duet between the first E♭ Alto and B♭ Tenor, the third Saxophone not being necessary. The Brass Unit consists of two B♭ Trumpets and one Trombone.

Thus far both of these Units have been independent factors and confined to two or three part harmony, in which the melody appears. When combining these two Units, only one of the two are written in that form, while the other is written so as to act as an accompaniment. However, there are instances when both Units can be identically the same. This should only be done when such special effect is desired, and even then, the color value or phrasing of the two Units should be different. The following example which is written in the concert key, will explain this more clearly.



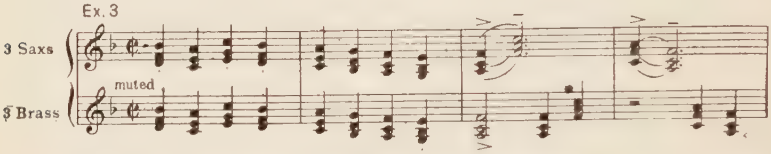
Although the harmonic notation of the two Units is alike in the above example, note that the rhythms, tone-colors and phrasing are not alike. This prevents a direct unison. In some instances this is not necessary.

Ex 2



The above example shows an absolute unison written for both Units in every respect. This is permissible because the effect created by such writing is appropriate to the theme. The following example shows another form of unison.

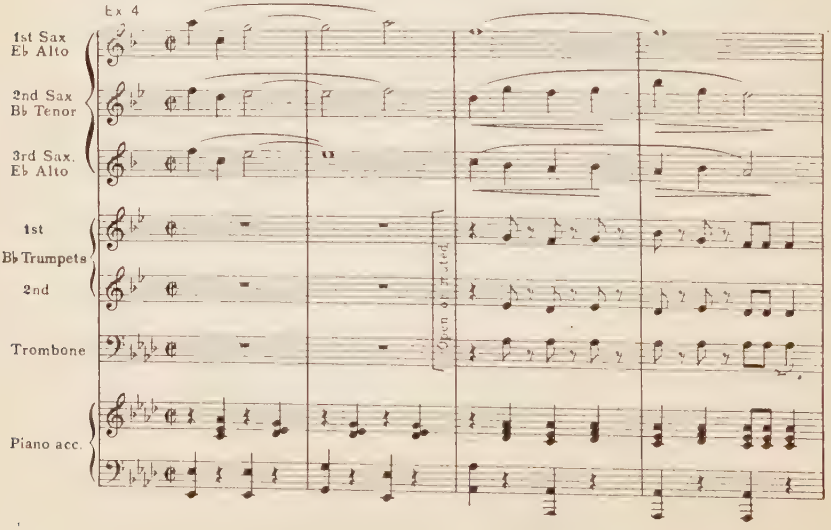
Ex. 3



The first two measures shown are that of a unison, in which only the tone-colors of the two Units are different.

So far, the examples shown only demonstrate an actual unison, which, however, is very valuable in some instances. This is especially so when a counter-figuration, to be written in conjunction with the sustained melody note, is sufficiently important enough to be emphasized.

Ex 4



The above example shows a Saxophone trio in which a very effective counter-harmony part is written for the second and third Saxophones in the last two measures. This effect can remain unassisted, but, can also be strengthened or exaggerated by adding the Brass at that particular point. In this example, the notation for the Brass Unit is written in different phrasing and tone-color from that of the second and third Saxophones. It may be played *open* or *muted.* The *staccato* playing is indicated so that the rhythm in general does not drag.

The last two measures, shown in Ex. 3, present a form of alternating between the two Units. By this, the unison is only created on certain beats of the measure. This introduces another form of combining the two Units, viz., Brass vs. Saxophones.

This form of writing constitutes the real art of arranging for the dance orchestra. Imagination must now be put into practice and the question arises "What should the Brass play in conjunction with a Saxophone trio?"

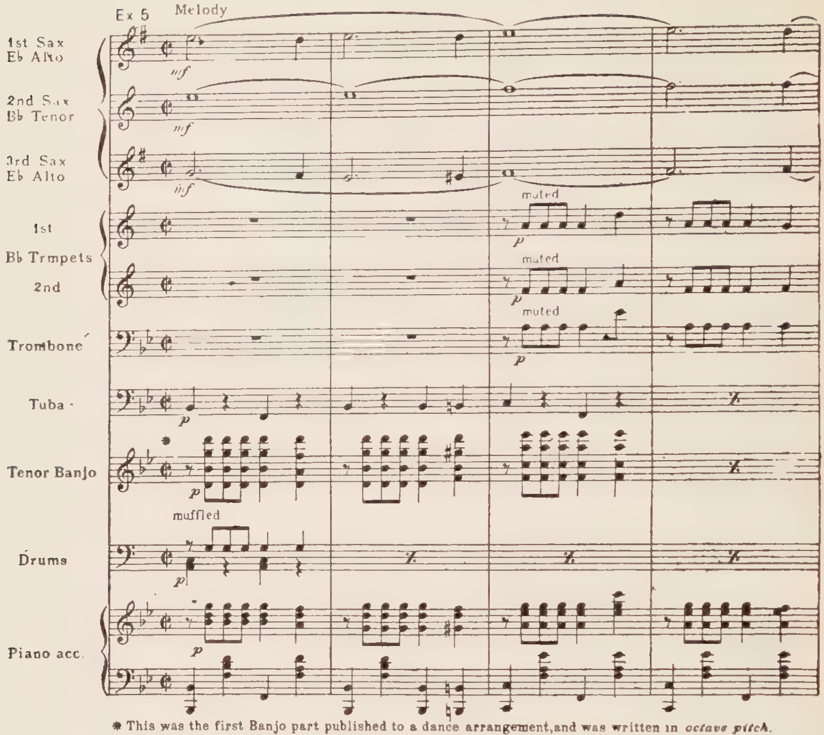
SAXOPHONE UNIT ASSISTED BY THE BRASS UNIT

The selecting of material for the Brass Unit, to be played during a Saxophone trio, is really a matter of personal taste and good judgment. Free composition and rhythmic liberties may be exercised, but before attempting this, the melody must be thoroughly analyzed. There are a great variety of ideas to be used, of which the most important and most instructive ones will be shown and explained. The first of these relates to rhythm. This is the simplest form of combining the two Units.

The average popular melody is usually constructed in phrases, at the end of which, the melody is sustained or held over, while the rhythm continues. Such places should be filled out in some way by a rhythmic figuration or color effect. This may be done by the Brass Unit.

The following example shows a score of a Saxophone trio which is assissted by the Brass Unit in such a way.

Ex 5



* This was the first Banjo part published to a dance arrangement, and was written in *octave pitch.*

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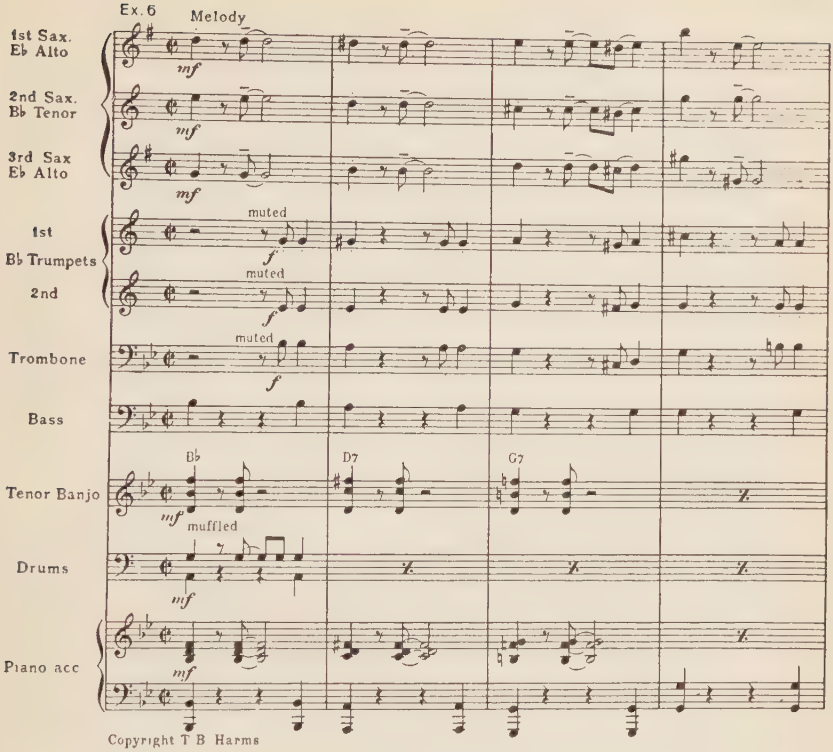
This form of writing is very simple and common.

Brass instruments are not very adaptable for intricate figurations. However, they can be used in many ways, equally effective.

The examples of scores hereafter shown, are extracts from well known popular and classical dance arrangements. These scores should be studied not only from a Saxophone vs. Brass viewpoint, but also from a color and rhythmic point of view. Each of the following scores include the Rhythmic Unit, which illustrates what has been said in a previous chapter.

Ex. 6



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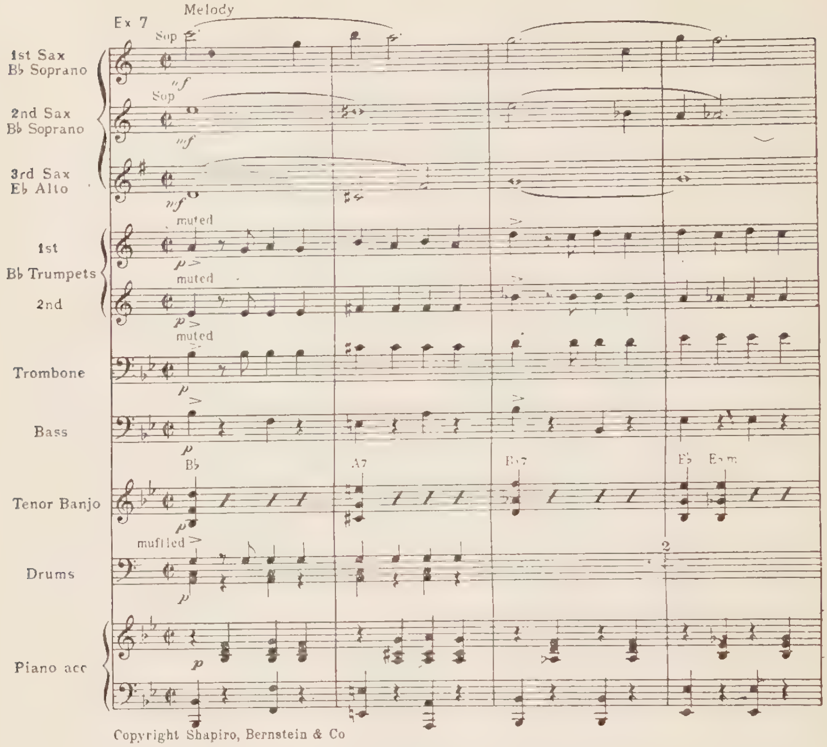
The above example shows a score of a Charleston arrangement. It consists of a Saxophone trio written in condensed form. The 1st Sax. E♭ Alto, carries the melody, the 2nd Sax. B♭ Tenor, assigned the most important harmony note, and the 3rd Sax. E♭ Alto, to the third harmony note. The three Saxophones are written in concerted-rhythm form, in Round and Open tone-colors. The Brass Unit which is written in concerted trio form, and in a Piercing tone-color, acts as a contrast to the Saxophone Unit. Note that the rhythmic beats, written for the Brass Unit, are on those beats of the measure, where the Saxophones sustain a concerted chord, also that the first beat of the second, third and fourth measures are additionally accented. The treble-rhythm of the Rhythmic Unit is written in disconcerted form. The Piano and Banjo parts are written as shown, so as to aid in emphasizing the Charleston rhythm, while the muffled Snare Drum is a composite of both the Saxophone and Brass rhythm, thereby synchronizing the entire rhythmic structure.



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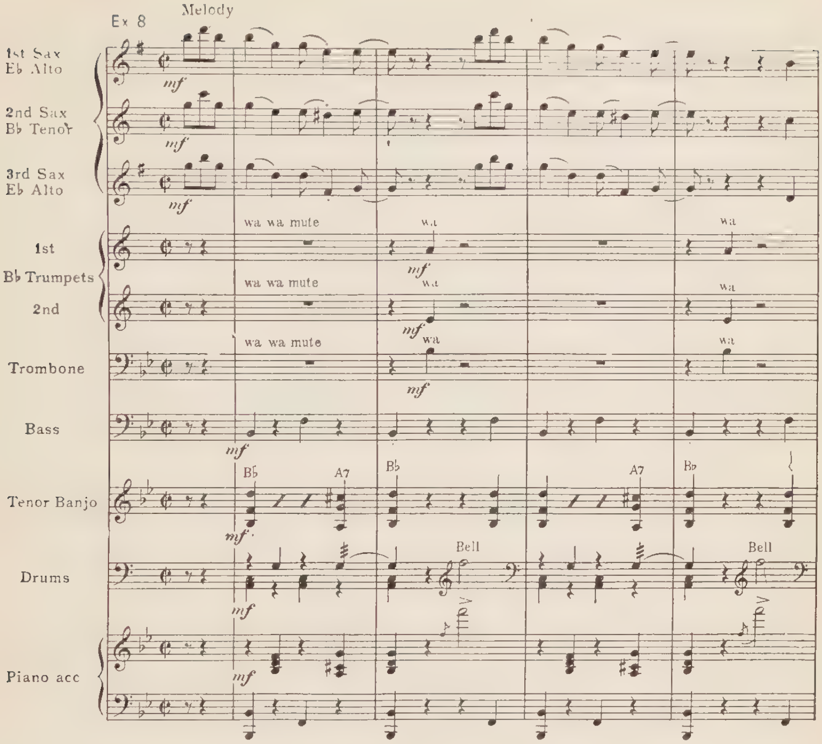
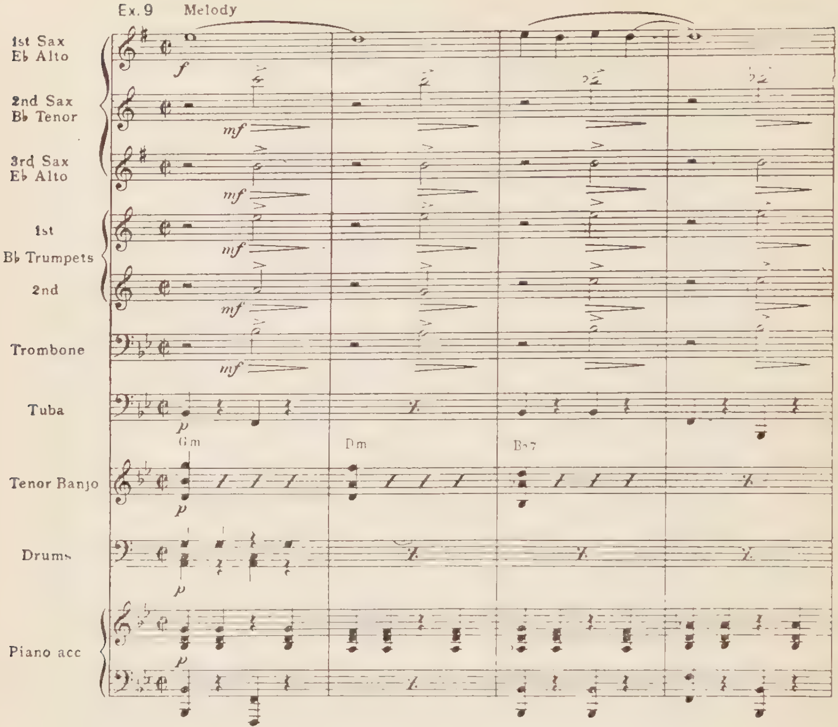
Ex. 7 presents a different style of arrangement. The Saxophone trio shown is written for two B♭ Soprano Saxophones and one E♭ Alto Saxophone. Note that the harmonic structure of this trio is written in *open position.* This creates two different tone-colors. The Sopranos are of the Piercing tone-color, while the Alto is of the Round tone-color. This is unusual, but in this instance the effect is pleasing. The low tones of the Alto Saxophone modifies the Piercing tone-color, which is brought out so prominently by the two soprano Saxophones and muted Brass. The Brass Unit is assigned to a set rhythm, which is accented at the beginning of every second measure. The first Trumpet moves from one note of the chord to another in an alternating manner, while the second Trumpet and Trombone remain on their respective notes. This adds considerably to the rhythmic value of the Brass Unit. The Rhythmic Unit is disconcerted, but written in common form. The muffled Snare Drum aids in bringing out the Brass rhythm definitely and is a contrast to the Brass Unit in tone-color.

Ex 8



Ex. 8 presents an extract from the score of the Rhythmic Paraphrase "NAILA." The theme is written for the Saxophones in concerted trio form in Open tone-color, and ends abruptly in the second and fourth measures (this characteristic effect being retained from the original composition by Delibes). The two beats left open in these measures are filled out by two different effects. The second beat is played by the Brass Unit in the form of a short "Wa," with the aid of the Wa-Wa mutes, and the third by a single bell beat written in the Drum part, assisted by the Piano. These effects are all of the Piercing tone-color. The last beat is again picked up by the Saxophone Unit.

Ex. 9



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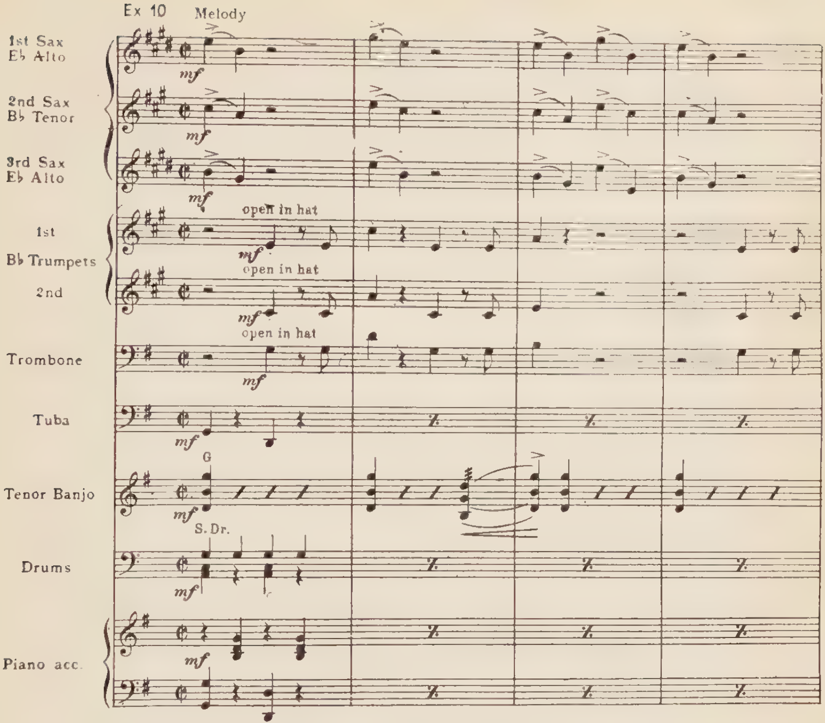
Ex. 9 presents another interesting score. It is that of a melody carried by the first Saxophone, E♭ Alto, accompanied by the Rythmic Unit. To this is added the Brass Unit and the two remaining Saxophones. These are assigned to a continuous rhythm in the form of a concerted chord, based on the harmony of the composition. This chord is written on the third beat of each measure, in an accented manner. Note the dynamics written in conjunction with these, which explain exactly how the chords are to be played.

The entire score is written in a similar tone-color. Both Open and Round are represented. A tone-color contrast is not necessary, because the rhythmic effect is enough contrast to the melody.



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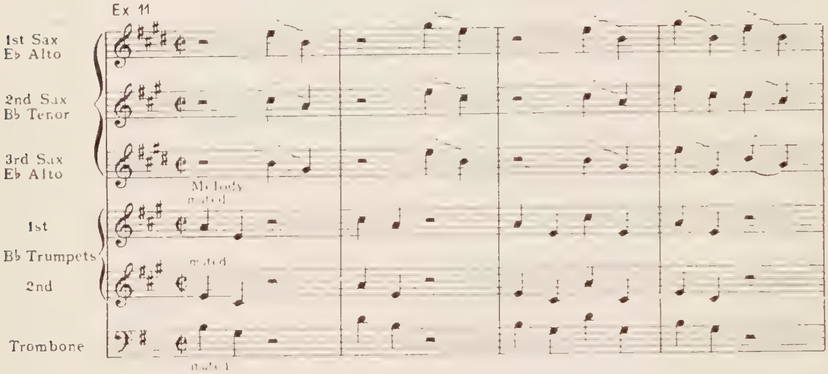
The above shown score is that of a very rhythmic composition. The melody is extremely martial and calls for a similar treatment in an arrangement. The Saxophone Unit is written in concerted form, the 1st Saxophone melody. The Brass Unit, "Open in Hat," is written in a different rhythm from that of the Saxophone Unit, and on those beats of the measure left open by the Saxophones. The subject written for the Brass Unit is of a "fan-fare" character and the notation is based on the simple harmonic structure of the composition. The Rhythmic Unit is written in common form, the only important point to note is the *glissando* for the Tenor Banjo, which begins on the fourth beat of the second measure and ends with an accent on the first beat of the following measure. In this score, a direct color conrtast is not necessary.

TRICK FORMS.

All the examples of scores shown thus far, have been ones in which the Saxophones have played the theme of the composition. The Brass Unit has only acted as an accompaniment to the Saxophones. This is only one form of combining the two units. The next form to deal with, is that in which the Brass Unit and the Saxophone Unit are of equal importance. By this is meant, that the theme of the composition is alternatingly played by both units. This form introduces what is commonly known as "trick effects." Free thought and composition may be exercised to the fullest extent. Any clever or humorous idea is permissible. However, the melody and harmonic structure of the composition must be kept in mind while arranging in this form. This is illustrated in the following example, which is another version of Ex. 10.

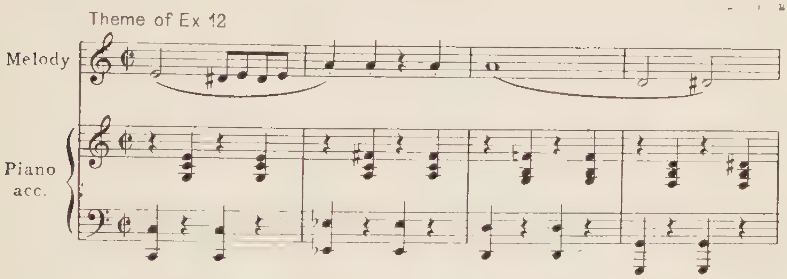
Ex 11



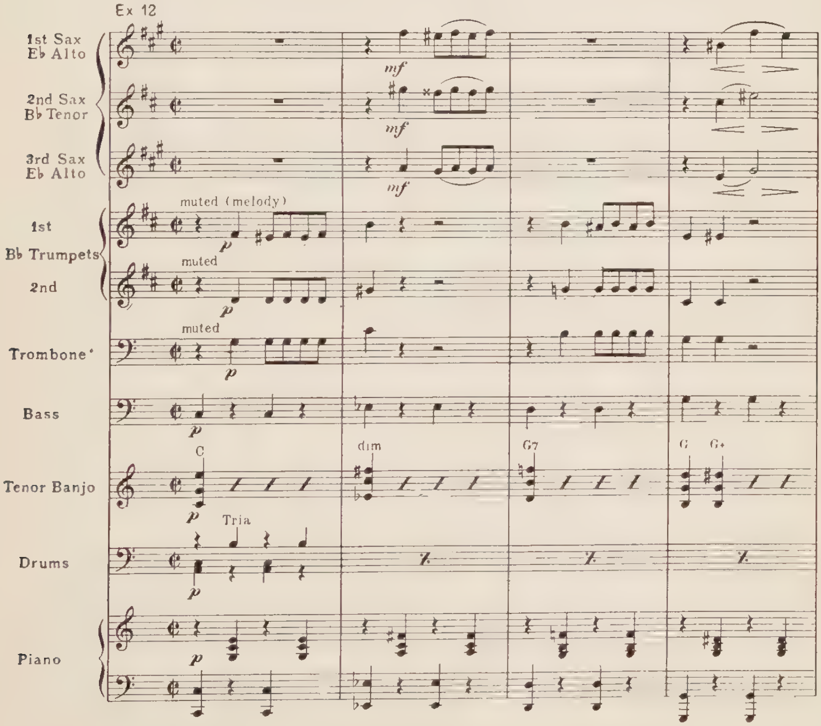
Ex. 11 shows a score in which the Rhythmic Unit is the same as in Ex. 10. In Ex. 10, the theme is written for the Saxophone Unit and the counter-rhythm written for the Brass Unit. In example 11 the theme is written for the Brass Unit and the counter theme is written for the Saxophone Unit, which is just the reverse of Ex. 10. Note however, that the phrasing of the theme is written *staccato,* and in Piercing tone-color. Also note, that the counter theme written for the Saxophone Unit is not the same as the counter theme written for the Brass Unit in Ex. 10; instead, the Saxophone Unit repeats the theme played by the Brass Unit, two beats later. This form of writing is known in theory as "fuge." The harmonic structure of the composition allows this trick idea. In this instance, a color contrast is necessary so that the two Units can be distinguished from one another. Although the above example looks very simple, it requires just as much thought and consideration as if it were more complicated.

Before showing any more examples on this subject, it is necessary to repeat that these are extracts from published arrangements of well known melodies. Scores to be shown are trick effects based on these melodies. For convenience, the theme of each composition will be shown preceding the example of the score.

The following example shows the theme of the Rhythmic Paraphrase, "Scarf Dance," which is a fox-trot adaption of the composition by C. Chaminade.

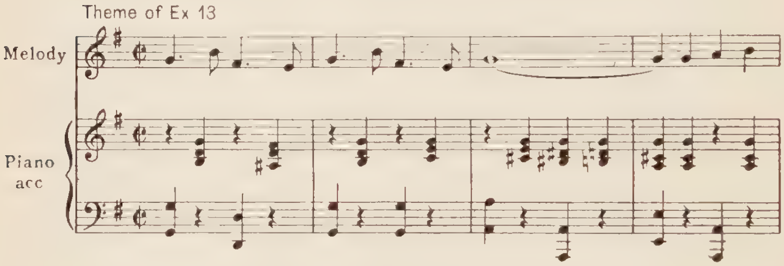


The score shown below is that of a trick effect based on the above shown theme.



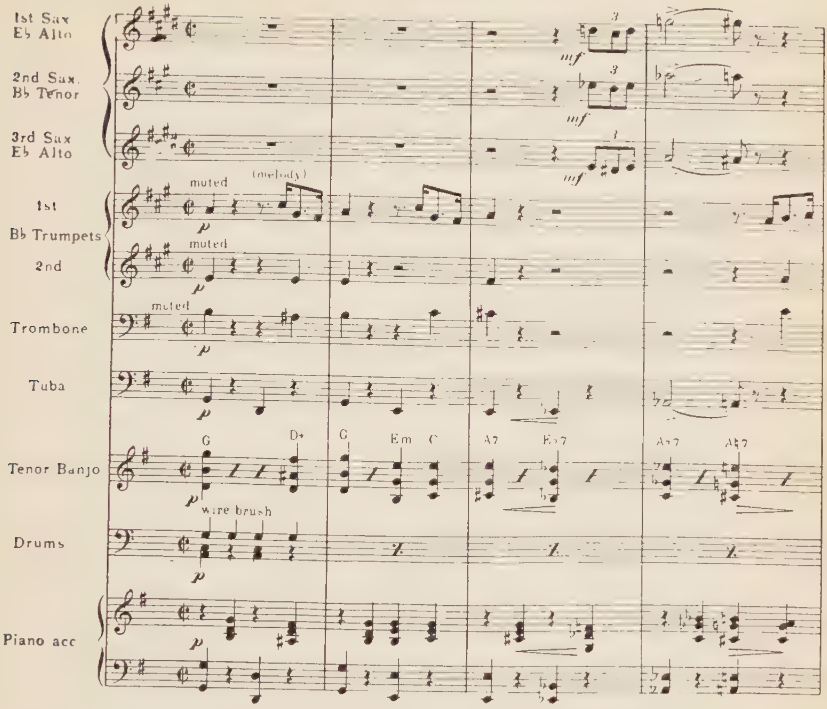
Ex. 12, presents a score in which the Brass Unit and the Saxophone Unit are written in alternating manner. In the first measure, the Brass Unit carries the original theme, which ends on the first beat of the second measure. The Saxophone Unit sets in on the second beat of the second measure with an imitation, based on the original theme. The Brass Unit again continues in the third measure with another imitation of the theme, which is based on the melody note of the composition. In the fourth measure, the Brass Unit carries the original theme in *quarter* instead of *half notes,* allowing the Saxophone Unit to again set in on the second beat with an obligato harmony effect. This slightly changes the harmonic structure of the composition, making the *augmented G chord* fall on the second beat of the measure instead of the third. Liberties like these are permissible when the effect is important enough. Note, that the rhythm of the theme, assigned to the Brass Unit, in the first measure, is slightly changed from the original theme. The first beat of the measure is left open, the down beat being played only by the Rhythmic Unit. This is written so that it is consistent in form with the imitation written for the Saxophone Unit. The Rhythmic Unit of this score is arranged in common form. The triangle after-beats, written in the Drum part, create a pleasing color effect and help to accentuate the rhythm. The tone-color contrast employed in this score is again necessary, so that the imitation of the theme is distinctly separated from the original theme.

The following example is the theme of a popular melody.



Ex. 13, presents a free form of trick effect. In this score, the theme is entirely carried by the muted Brass Unit, in a rhythm different from that shown in the original theme. The first Trumpet plays every note of the melody, while the second Trumpet and Trombone only play the most important accentuated beats of the trick effect. Note that the second Trumpet is omitted on certain beats. This is done so as to not interfere with the Trombone, which carries the most important intervals of the chord. The third and fourth measures of this score present a very interesting example of free composition. The melodic and harmonic structure is entirely changed from that shown in the original theme. In this instance the harmonic structure consists of an eccentric progression of chords, which lead back to the harmony of the original composition. To

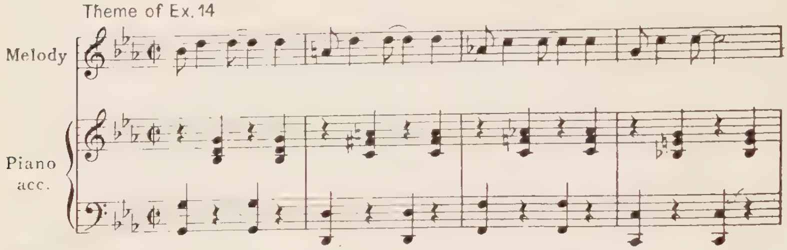
Ex 13



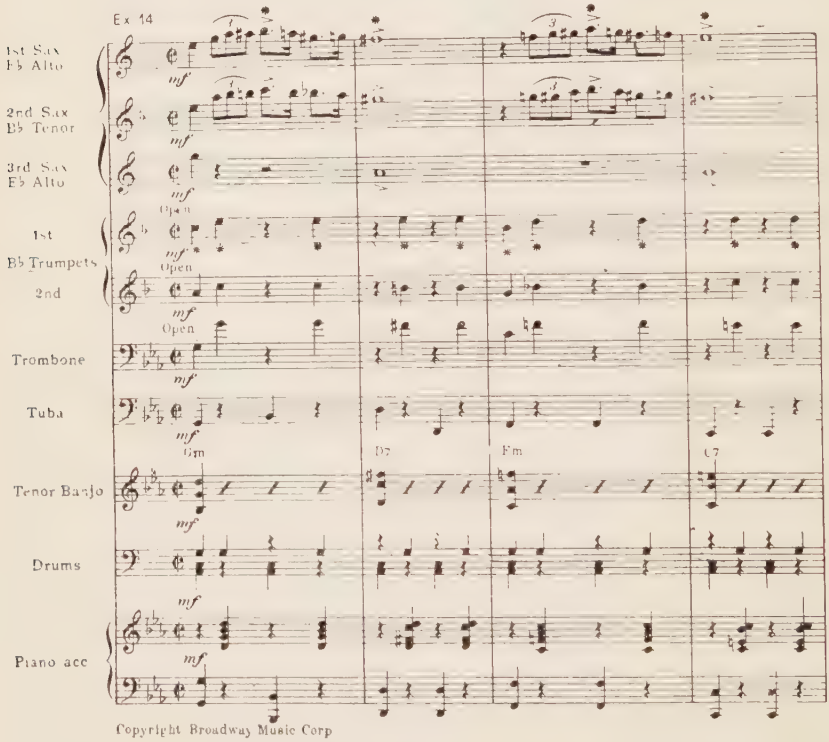
this is added the Saxophone effect as shown, which is based on the harmonic structure of the Rhythmic Unit. Note the tone-color contrast between the two Units.

The melody note, in the third and fourth measures of the original theme, is practically held over for a duration of five *quarter* beats. This is lengthened in the score for a duration of seven *quarter* beats; the up-beat played by the first Trumpet being in *eighth* note valuation, instead of quarter note valuation. This open space of eight *quarter* beats gives opportunity for the Saxophone effect shown in the third and fourth measures. Effects like these, when first conceived, may seem very daring, but fear of bad result must not be anticipated.

The following example shows the theme of another popular melody.



The following example shows the score of an unusual trick effect based on the above shown theme.



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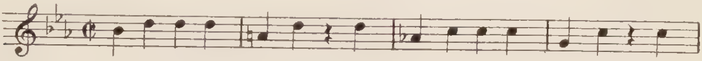
Ex. 14, presents a score in which the Saxophone Unit plays a figuration for two Saxophones, while the open Brass Unit is assigned to afterbeats in trio form. The third Saxophone has been partly omitted, not being needed to complete the effect. This score presents an example of imagination. In this score particularily, both the Brass and Saxophone

Units are of equal importance, owing to the fact that the melody appears in both units, in quick, alternating manner. For this reason, both Units are written in the same tone-color.

In creating this trick effect, the rhythm of the melody has been changed. The following shows the rhythmic revision of the melody.

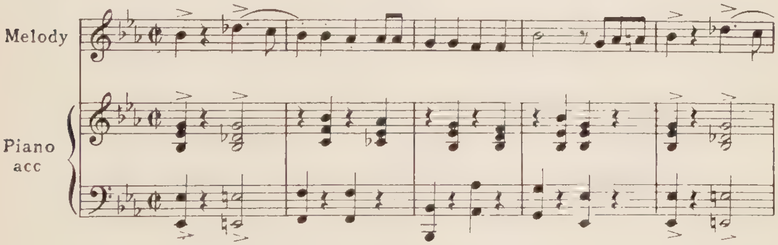
Revised rhythm of theme



In the score, the revised melody just shown, is represented by the 1st Saxophone and the 1st Trumpet, and the notes marked by a (*) are the melody notes. The figuration written for the Saxophone Unit, therefore serves two purposes, rhythmic and melodic. Rhythmically, in direct contrast to the Brass Unit, and melodically, to the extent of four notes. The after-beats written in the Drum part, help to accentuate the Brass.

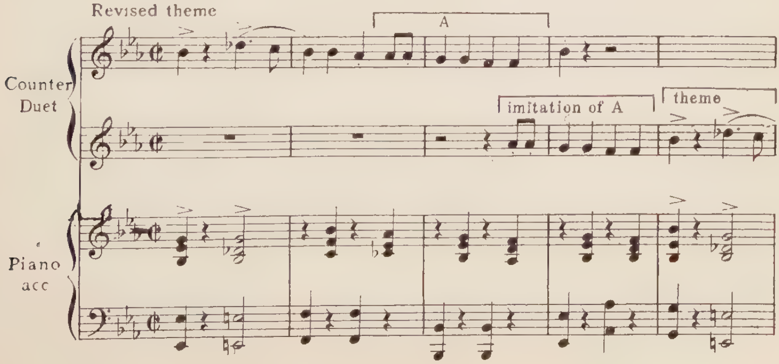
The following example shows the theme of another melody to be arranged in trick form.

Theme of Ex 15

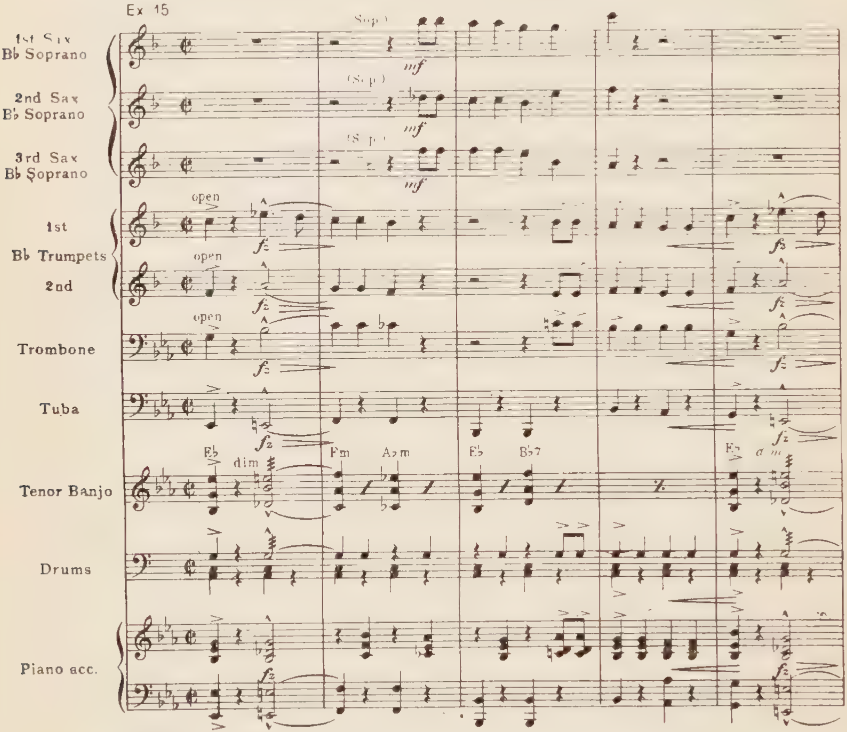


Before showing the score of the trick effect, it is necessary to explain how the melody and harmonic structure of the composition is revised.

Revised theme



The "cannon" form, which is another form of "fuge," and deals with the imitation and repetition of theme, has been applied. This has been adapted for the dance orchestra in the following way.

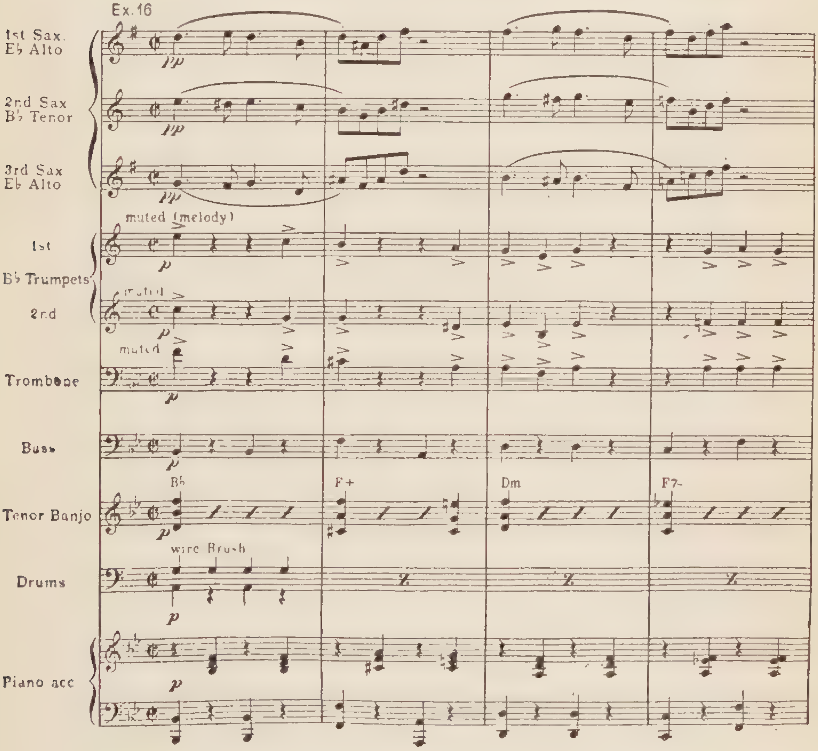


Ex. 15, presents the score of a trick effect, in which the Soprano Saxophones are employed. In the first two measures, the open Brass Unit carries the theme in a partly open-position trio. The theme is then picked up by the Soprano Saxophone Unit, at the end of which the Brass Unit again picks up the same theme in close-position trio form. In the first measure, the Rhythmic Unit helps to accentuate the Brass Unit, and then goes on in the usual rhythmic form up to the fifth measure, when again the Rhythmic Unit is concerted with the Brass Unit. Note, that in the third and fourth measures, the Snare Drum is written in the same rhythm as the Brass. The tone-colors represented in this score are the Piercing, played by the Saxophone Unit, and the Open played by the Brass. Although two different tone-colors are employed, there is a great similarity of tone-color between the two Units. This is caused by the fact that the 2nd Saxophone (B♭ Soprano) is written in the Open tone-color register.

The Piercing tone-color produced by the Snare Drum (snares on), penetrates through the Open tone-color, thereby accentuating the rhythm.

It should be mentioned, that when working out a trick effect, the character of the melody must be considered. Not only from a rhythmic view point, but also from a poetic point of view. Any trick effect, similar to the one shown in Ex. 14, is too eccentric to be applied to a smooth, flowing melody. Such a melody requires a trick effect, which retains the character of the theme.

Ex. 16



Ex. 16. presents a score in which the muted Brass Unit carries the theme in short *quarter* notes, while the Rhythmic Unit is assigned to a simply rhythm. These two units are sufficient in bringing out the melody and rhythm, and, therefore, may stand alone without the aid of the Saxophone Unit. The original character of the melody is smooth, and does not deserve such treatment. Therefore, the crude effect of these two Units is softened by adding the Saxophone Unit as shown. The Saxophone Unit presents an example of free composition, based on the harmonic structure

of the composition. The first Saxophone part, which is the leading instrument of this Unit, is written in direct counter-point to the melody. This is harmonized in concerted trio-form with the second and third Saxophones. It is essential that the Brass Unit plays very *staccato* and *concerted,* and that the Saxophone Unit plays very soft; the *legato* in the first measure being prominent, and the notes in the second measure very *staccato.*

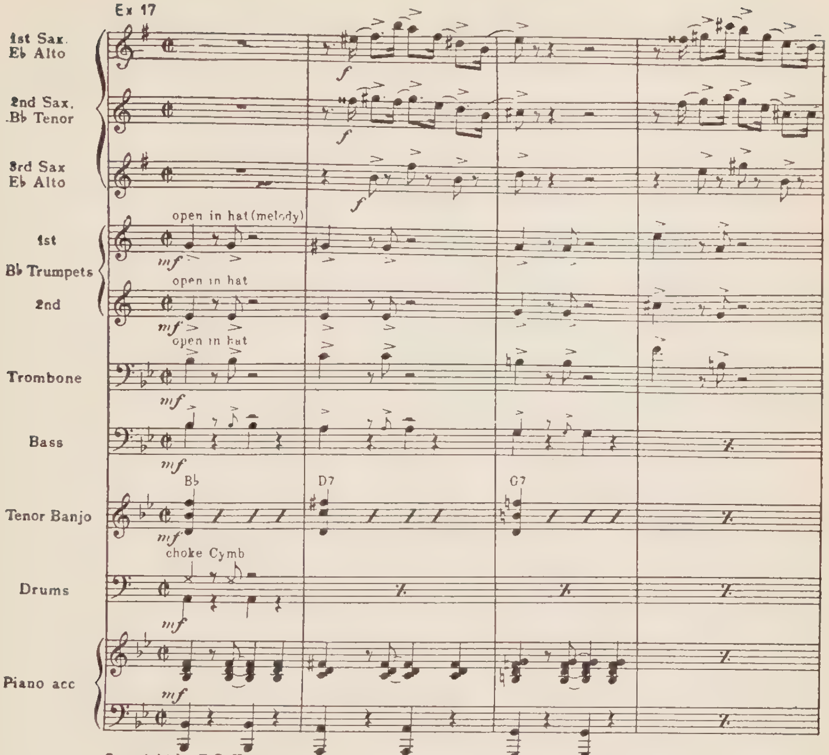
This score presents a very interesting study in tone-color. The Saxophone Unit is of the Round tone-color, being influenced by the low tones of the 2nd and 3rd Saxophones. The Brass Unit is of the Piercing tone-color. This extreme contrast between the two Units aids in bringing out the "trick" clearly. The Piercing tone-color is also represented by the wire brush, written four beats to a measure, in the Drum part. The balance of the orchestra should play soft enough so that the swishing of the wire brush is discernible. This introduces another form of Brass vs. Saxophones in which the Saxophone Unit assists the Brass Unit.

BRASS UNIT ASSISTED BY SAXOPHONE UNIT.

Ex. 17 shows a reversed version of Ex. 6 (page 130). Instead of the Saxophone Unit carrying the theme, the Brass Unit carries the theme.

Ex. 17, presents a score of a "hot" arrangement. The theme is carried by the Brass Unit "Open in hat" in a concerted trio form. The Saxophone Unit is assigned to a figuration in the second and fourth measures. Note, that this figuration is only completely written for the 1st and 2nd Saxophones, while for the third Saxophone, only the accentuated beats of the figuration are written *staccato.* It is advisable to write in this form when a Saxophone figuration is more adaptable for two Saxophones, than for three. The Rhythmic Unit is written in a disconcerted-rhythm form. The treble-rhythm presents three different rhythms. Before analyzing this, it is necessary to mention that the Charleston rhythm becomes monotonous when overdone. For this reason it is advisable to have one of the rhythm instruments employed in playing a straight rhythm. In this particular score the Tenor Banjo has been assigned to this duty. The Charleston rhythm is accented by the choke cymbal, written in the Drum part, while the Piano treble-rhythm is a composite of the Banjo

Ex 17



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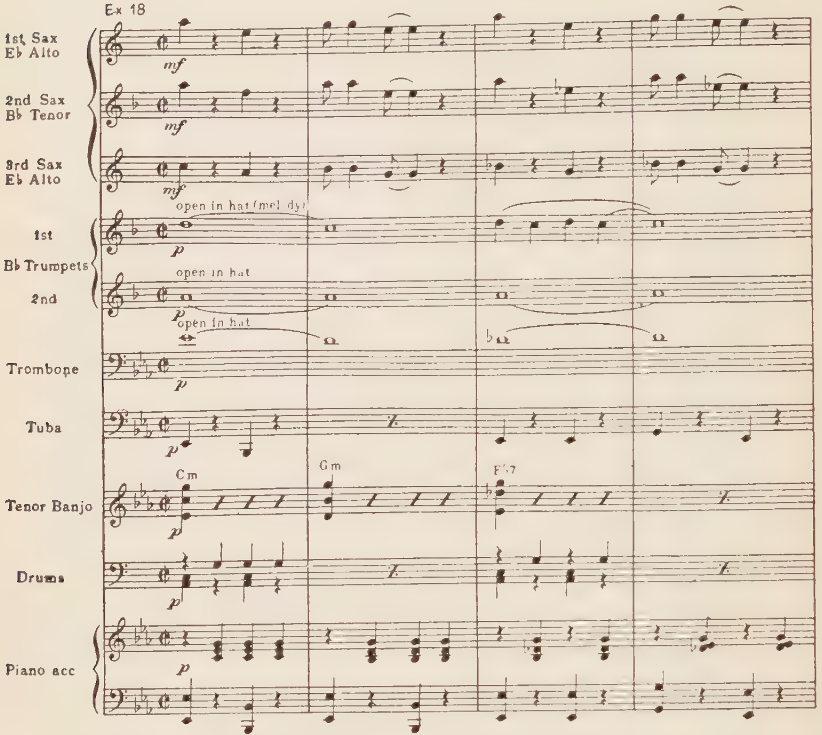
and Drum rhythm. The Brass rhythm can be written in Charleston rhythm, but in this instance, a straight rhythm has been employed so as not to leave the Banjo unassisted in straight rhythm. However, there are instances when the Bass Violin or Tuba may join the Brass Unit in the Charleston rhythm. This has been indicated in the score by small notes and is a matter of choice. The Bass Drum and left hand of the Piano are sufficient in emphasizing a straight rhythm.

In this score the Brass Unit is of the Round tone-color whereas the Saxophone Unit is of the Open tone-color. When playing a "hot" arrangement, the Saxophone players are apt to force the tones of their instruments. This creates a Piercing tone-color, thereby augmenting the contrast between the two units.

The following score is another version of Ex. 9, but in the key of E♭.

Ex 18



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So far, in all examples shown in this chapter the Brass Unit has been more or less written for *staccato* playing. This score (Ex. 18) presents an exception to that form. The smooth character of the melody, and long duration of melody notes, is more adaptable to *legato,* than *staccato* playing. Therefore, the Brass Unit has been written in close harmony trio form and to be rendered in a very *legato* fashion.

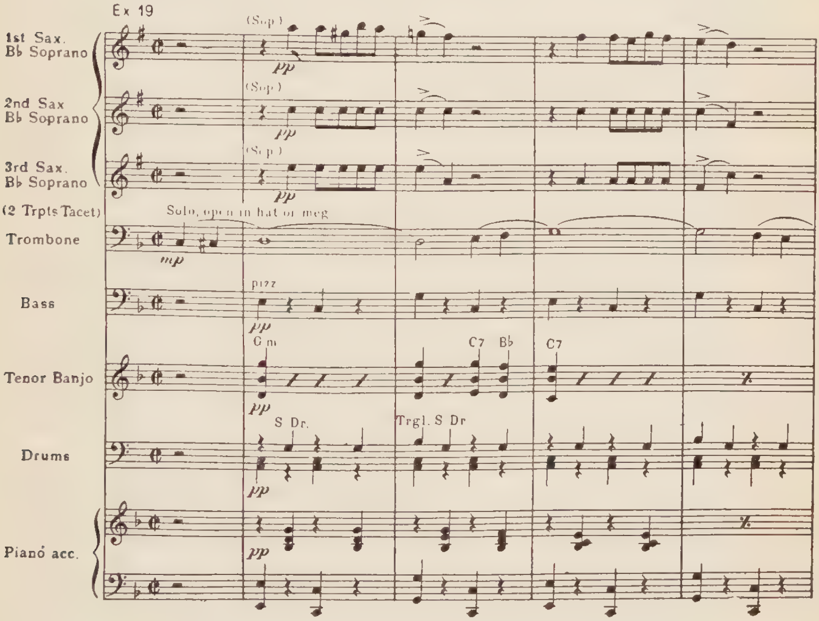
The Rhythmic Unit is written in a simple rhythm, and combined with the Brass Unit, forms a complete arrangement. Usually when Brass instruments play in such sustained manner, they have a tendency of dragging the rhythm. For this reason the Saxophone Unit should be added where such dragging of rhythm is unavoidable.

In this instance, the Saxophone Unit has been added in a rhythmic form. The Saxophone Unit is written in close harmony trio form, and in the notation of a rhythm, based on the harmonic structure of the composition. Note that the *staccato* phrasing indicated, is in direct contrast to the Brass Unit.

The tone-color values of both units are of the Open tone-color. Inasmuch that the Saxophone Unit is only written so as to aid the rhythm, a color contrast is not necessary.

So far the Brass Unit has been confined to concerted trio-form, but there are instances when the Saxophone Unit may assist a solitary Brass solo. The following example is a score in such style.

Ex 19



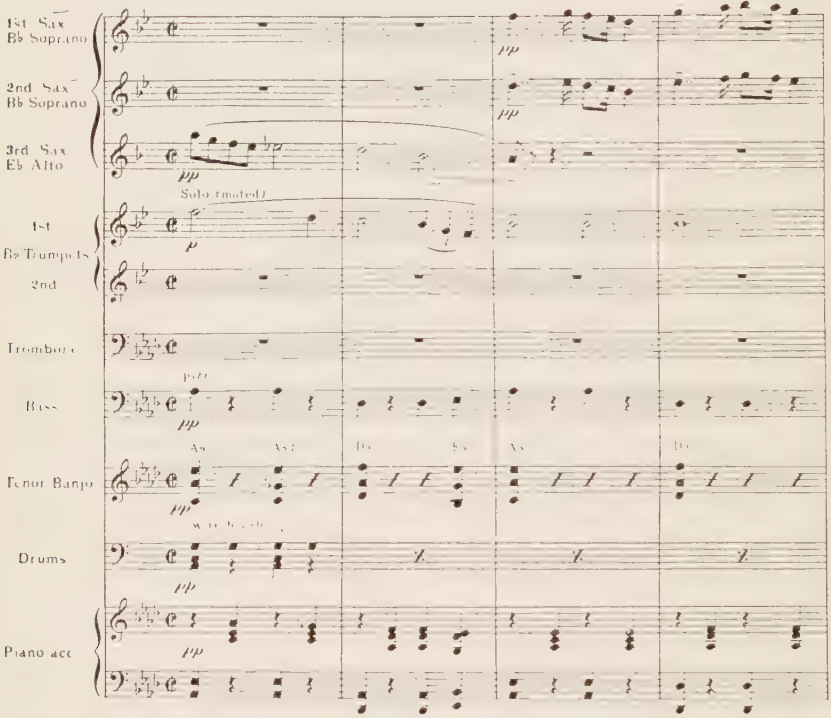
Ex. 19, presents a score of a Trombone solo which is assisted by three Soprano Saxophones. In this score the two Trumpets are not necessary and, therefore, are omitted. This score is an extract of the Rhythmic Paraphrase "Faust." The theme is carried by the Trombone, "open in Hat" or through a megaphone. The Saxophone Unit, in this score, is written in concerted trio form in close harmony position, and is assigned to a rhythmic figuration, which occurs during the long sustaining of the melody note. A point, which has been brought out in a previous chapter which deals with Saxophones, is illustrated in the Saxophone Unit. In the above score, measures two and four, the second and third Saxophones alternate their notes. Such writing creates more rhythm in figuration, than if each of the Saxophones were to be held over on the same notes. In the second measure, however, only the third Soprano Saxophone moves from one note of the chord to another.

The fact that one Saxophone remains on the same note does not harm the rhythm. This is so, because the first and third Saxophones overcome the sustaining effect of the second Saxophone. Note, the large interval between the Trombone solo and the lowest note of the third Soprano Saxophone. This interval is filled out by the sonority of the Rhythmic Unit accompaniment.

The Piercing tone-color created by the Saxophone Unit serves as a contrast in tone-color to that of the Trombone solo.

Another form of Brass solo assisted by the Saxophone is shown in the following score.

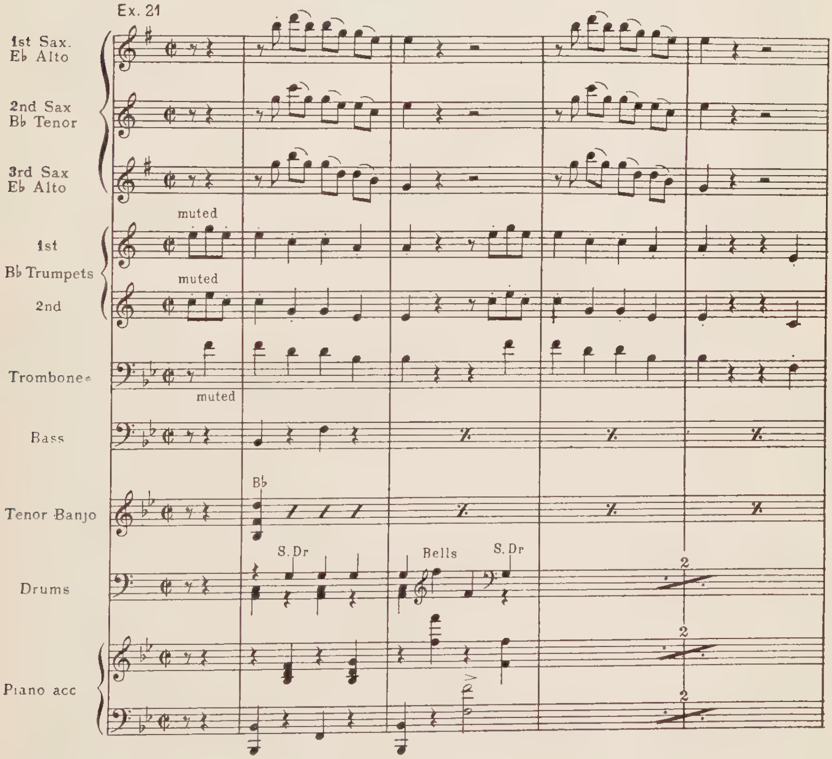
Ex 20



This score is an extract from the Rhythmic Paraphrase "Echoes of Ireland." It is that of a Trumpet solo muted, accompanied by the rhythmic Unit in simple rhythm form in which the wire brush is written for the Drum part. In the third and fourth measures, the two Soprano Saxophones are employed in playing a characteristic figuration. This figuration is Irish in character and is, therefore, appropriate to the composition. The third Saxophone, which is an E♭ alto, is assigned to a very pleasing obligato which sounds below the Trumpet solo, and ceases at the beginning of the third measure. The Soprano Saxophone figuration is in duet form and in thirds. The harmonic structure of the fourth measure is different from that known in conjunction with the original composition. This is done so, that the counter theme is made possible for the Soprano Saxophones. The tone-color scheme of this example is somewhat different from those shown heretofore. In the first two measures, it is that of a Piercing tone-color solo, assisted by an Open and Round tone-color in the form of an obligato. The last two measures present a form of Piercing tone-color trio between the muted Trumpets and the Soprano Saxophones.

The following two scores are extracts from the Rhythmic Paraphrase "Naila."

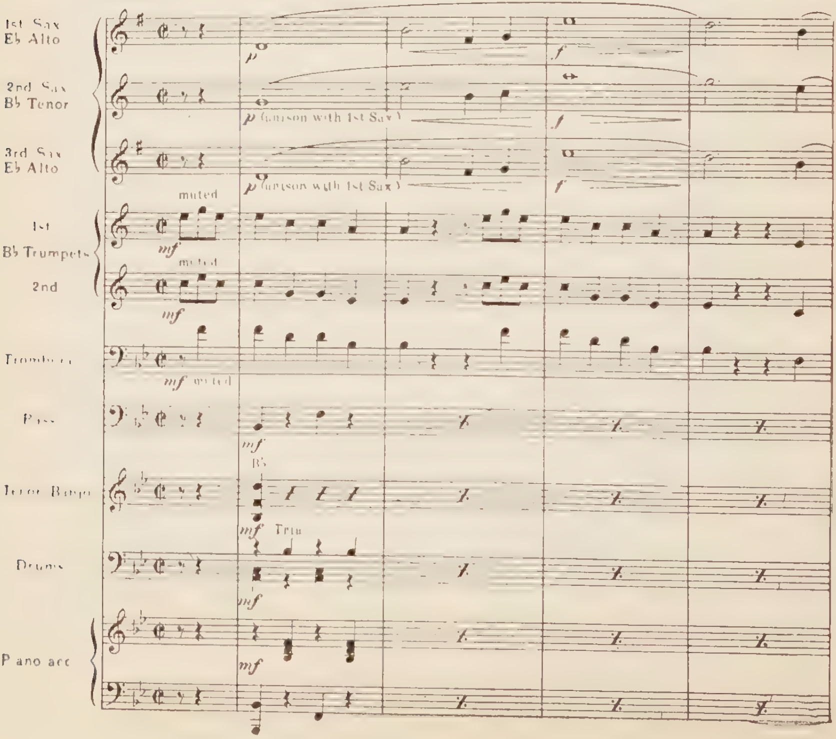
Ex. 21



Ex. 21 shows another version of Ex. 8. In this score, the Brass Unit carries the theme, *staccato*. The Brass Unit is written in close harmony and concerted trio-form. The only exception to this is shown in the Trombone part, which plays a *staccato quarter note* on the accented beat of the *eighth notes* written for the Trumpets. This synchronizes rhythm of the Brass Unit definitely. The Saxophone Unit, in this particular score, is assigned to an imitation of the theme, but in double rhythm instead of *quarter* notes. To do this, the Saxophone Unit necessarily has to be written so as not to begin too early. Therefore, the Brass Unit begins the theme in slow motion, after which the Saxophone Unit enters with the same theme in the second measure, but in fast motion. Before the first two measures are again repeated in the third and fourth measures, two *quarter* beats are left open by these two Units. These are filled out by the Rhythmic Unit in the form of two bell beats, written in the Drum part, doubled in the Piano Part. The Bass, and Tenor Banjo keep a strict simple rhythm throughout.

The Saxophone Unit is of the Open tone-color, whereas the Brass Unit is of the Piercing tone-color. This contrast is necessary so that the imitation of the theme carried by the Saxophone Unit, is clearly discerned from the theme carried by the Brass Unit. The two bell beats written in the Drum part are also of the Piercing tone-color which acts as a continuation of the same color left off by the Brass Unit. It should be mentioned that the imitation of the theme carried by the Saxophone Unit, is really the authentic setting of the original composition. This charming composition by Delibes, which in the original is a Waltz from the Ballet "Naila," contains a beautiful obligato counter melody.

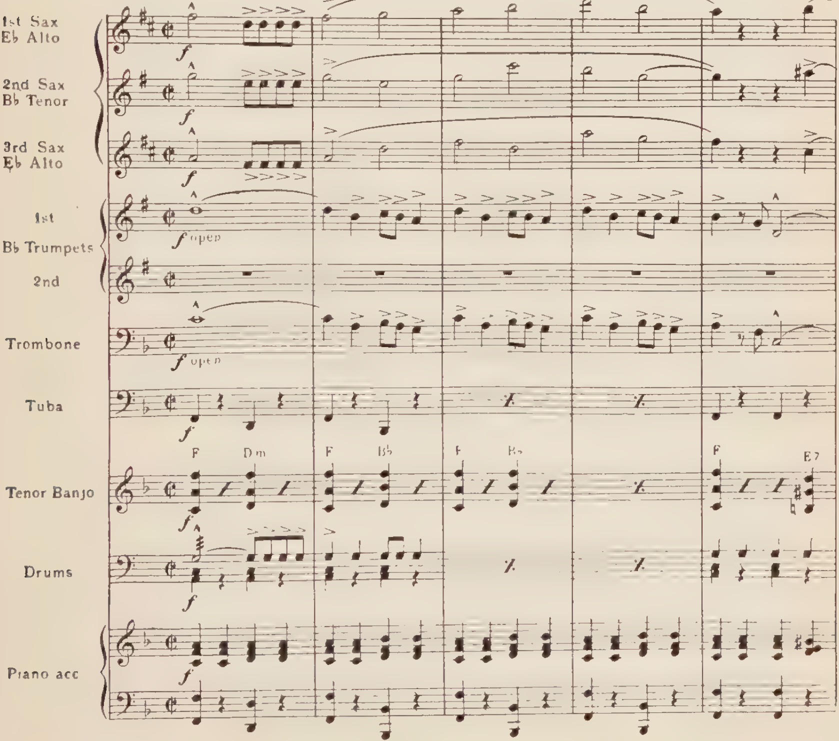
Ex 22



In the above shown score, the Brass Unit is exactly the same as in Ex. 21, whereas the Saxophone Unit is assigned the obligato quoted above. All three Saxophones are written in unison phrased alike, as indicated by the crescendo and decrescendo marks. There are no open beats left in the second and fourth measures. Therefore, it is not necessary for the Rhythmic Unit to fill in the beats as shown in Ex. 21. Instead, in this score, the Rhythm Unit is written in unbroken rhythm. In the Drum part, however, the after-beats on the triangle add color to the rhythm.

The Piercing tone-color is represented by the muted Brass Unit and the triangle after-beats. For the first time the "Duplex" tone-color is illustrated. It is in the form of a "Duplex-Round" color. It is created by a Saxophone Unit, in which the three Saxophones play unison in the low register.

Ex 23



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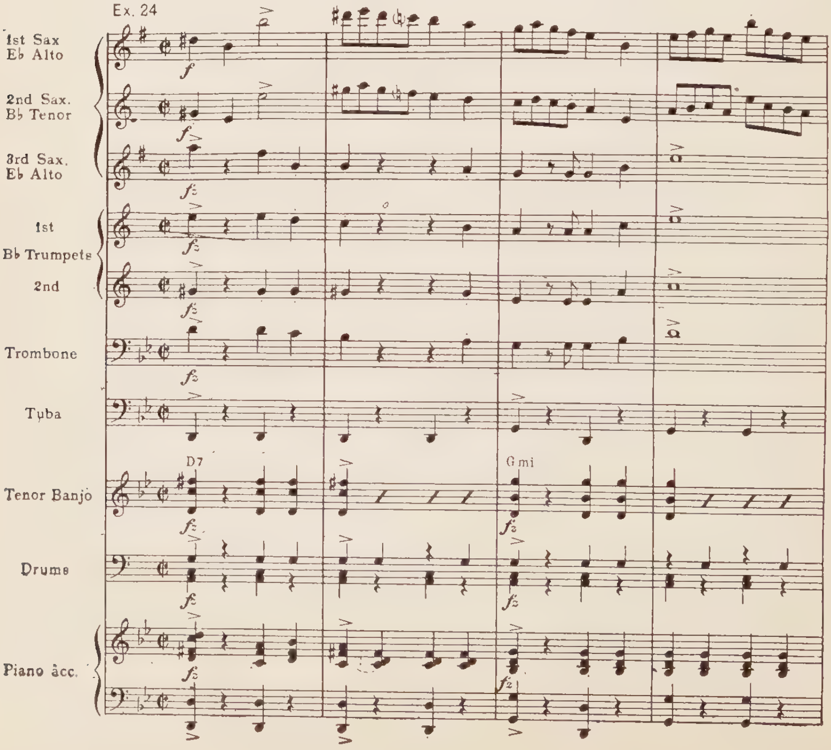
Ex. 23 presents a score in which the tone-color values need explanation. The Brass Unit, in this instance, consists of one Trumpet and one Trombone, the second Trumpet not being necessary. These two instruments are written in Open tone-color. The Saxophone Unit is engaged in playing sustained chords, and also in the Open tone-color. Regardless of this, a great contrast still exists between the two Units. This is caused by the difference in phrasing of the two Units. In the first measure, the first two beats are represented by a concerted chord, for both units in the same tone-color. This is followed by a group of eighth notes, written for the Saxophone Unit. After this, the Saxophone Unit continues in the form of close position-trio chords, written in one-half notes, *legato,* as indicated.

Against this, the Brass Unit carries the theme of the composition, *staccato*. This creates a rhythm in contrast to the Saxophone Unit. Note, that the Trumpet and Trombone are written in octaves. This creates a form of Duplex-Open tone-color, which is a direct contrast to the tone-color of the Saxophones. Due to the fact that the melody is written in the low register for the Trombone, it will penetrate through the Open tone-color of the Saxophone Unit. In this score the Rhythmic Unit is assigned to common rhythm, in which the Snare Drum plays the combined rhythm of both Brass and Saxophone Units. The following is a score similar to the one just shown.

Ex. 24



The same color relations exist in this score as in Ex. 23. However, the Saxophone Unit is assigned another form of figuration. The theme is carried by the Brass Unit, first Trumpet and Trombone in octaves. The second Trumpet is added so as to fill out the harmonic structure left open by the Saxophone Unit. Both Brass and Saxophone Units are of the Open tone-color. In this score the color contrast is created in a different manner from that shown in Ex. 23. Note, that both Units are written in similar rhythm, i.e., *quarter* and *eighth* notes, and that both theme and figuration, are to be played *staccato*. Also note, that the first and second Saxophones are written in octaves. This creates a Composite tone-color, which counter balances the octaves written for the Brass Unit. By this an even balance between the two units is obtained. The third Saxophone in turn, completes the harmony. The Rhythmic Unit is written in strict common rhythm form, to cement the other two Units together, rhythmically. Note, however, that the second beat of the first measure is left open. This is done to emphasize the character of the composition.

All that can possibly be written for the different units, in the forms quoted, has not been shown. Ideas, too numerous to mention, can be applied. The forms given, and examples shown, should act as a guide and stimulate the creation of other ideas. Every new melody stimulates new material and effects.

The last two examples shown are similar to ensemble scoring. This subject is dealt with in a later chapter.

CHAPTER XX

BALANCE

Balance, as applied to musical instruments, represents that part of arranging which deals with the proper distribution of harmony to the various instruments of the orchestra. This is an item which can never be overlooked in making an arangement. Without balance, an arrangement will become top or bottom heavy.

As already explained in a previous chapter, each instrument of the orchestra possesses one or more different tone-colors. These are important in the matter of balance.

In the last chapter, "Brass vs. Saxophones," color relations and contrasts have been illustrated by score examples. In these, the color contrasts existing between the Saxophone and Brass Units are necessary so that the musical thoughts assigned to each respective unit will be clearly distinguished from one another. This should always be done when two different musical thoughts are to be expressed simultaneously, but, when the entire orchestra is to be concerted in expressing only one musical thought, then such color contrasts should be avoided. Instead of color contrast, tone-color of equal sonority and volume should be employed.

VOLUME OF TONE-COLOR.

Volume, as applied to balance, does not mean the force with which a musical tone is played. In that sense, it is governed by *dynamics*. In relation to balance, volume refers to the natural volume of a tone-color, produced on an instrument under normal conditions. Tone-colors of equal sonority, are more or less equal in volume. However, the penetrating qualities of the different tone-color volumes are not alike. The natural volume of the Open and Piercing tone-colors penetrate more than the Round tone-color. However, the Round tone-color will penetrate through the Piercing and Open tone-colors when these are subdued by the use of dynamics.

FORMS OF BALANCE.

In further explaining balance, four fundamental forms of balance are introduced, viz., "Perfect," "Composite," "False," and "Full" balance. A "Perfect" balance is one in which one tone-color is employed. When more than one tone-color is employed, it becomes a "Composite" balance. However, it only becomes this when the Piercing tone-color is included in the combination. When the Open and Round tone-colors are combined, the volume created is strong, full and sonorous, therefore, a balance thus created is termed "Full balance." This form of balance is the most valuable, and in the dance orchestra, represents the real backbone of the harmonic structure. When the combined tone-colors are unequal in volume, and are controlled by *dynamics* so that an equal balance of volume is produced, it constitutes a "False balance."

The Violin in Balance

Any of the above mentioned forms of balance are chiefly created by the Saxophone and Brass Units. The tone-colors of the Violin, are too weak in volume to be matched with those just mentioned. Nevertheless, the Violin must be included among those instruments concerned with balance. When adding the Violin, in any tone-color, to any form of tone-color balance, such balance is not fundamentally altered. The added tone-color of the Violin will augment the volume, and at the same time modify any coarseness or crudeness of sound occuring from other instruments.

The Tuba in Balance

Of all the instruments concerned in balance, the Tuba is the most important. In relation to balance, this instrument should not be considered strictly a rhythm instrument. Whether assigned to rhythm, or otherwise, it, at all times, represents the fundamental bass of the entire orchestra, and, therefore, also all color-effects and forms of balance. During the rendition of a Saxophone trio, this instrument assists in completing the harmonic structure, as well as producing rhythm.

Balance as Applied to the Rhythmic Unit.

As already stated in a previous chapter, the Rhythmic Unit acts as a background to all other effects. It must be remembered, that the fundamental principle of all dance music is rhythm, and to this the instruments of the Rhythmic Unit have been assigned. Although these instruments have individual tone-color and volume, *they must not,* with the exception of the Tuba, be *separately* considered in creating balance. The tone-colors of these instruments, *combined,* produce a tone-color and sonority, individual and neutral to all others. The volume is controlled by *dynamics.* From a constructive point of view, the Piano is the most important instrument of the Rhythmic Unit. This applies chiefly to harmony.

Concerted Chords and Their Construction.

Concerted chords are the best medium through which to further instruct on the subject of balance. Balancing such chords plays an important part in arranging. Therefore, instructions will be given on how all the foregoing principles of balance are applied to concerted chords.

During the rendition of a dance arrangement, concerted chords are frequent and very effective. They are usually written in conjunction with introductions, modulation, etc. When a concerted chord is to be scored, the melody of the composition invariably leads to the melody note of the concerted chord. Therefore, this melody note becomes the one on which the chord is constructed. With the melody note as a guide, the chord to be written must be decided on. In doing this, the selecting of the proper bass note is essential. With both melody and bass note in mind, the interval existing between these two must be filled out with intervals belonging to the chord.

This may be done with the aid of the Piano.

Balance as Applied to Concerted Chords.

After a concerted chord is constructed, the different intervals of the chord must be assigned to the various instruments. In doing this, the tone-color and volume to be applied must first be considered. Concerted chords are most effective when written in Full balance form. For this reason, they should be confined to this form of balance as much as possible. In some instances it cannot be done, but invariably it is possible. If, in making an arrangement, a muted Brass Unit is required, and in the course of such an arrangement a concerted chord is to be scored, even then, a form of balance similar to Full, can be used. The Composite form of balance will act as a successful substitute.

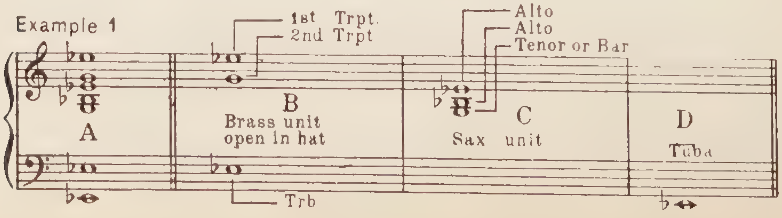
In distributing the intervals of a chord to the various instruments, the melody note is the first to be considered. It may be assigned to the Saxophone, Trumpet or both, but such choice governs the manner in which the other intervals of the chord are to be distributed. It also influences the tone-color of the chord.

Balance is now further illustrated by examples. For easy comprehension these are in the concert key notation.

Perfect Balance.
in
Round Tone-Color.

The following example is that of an E♭ chord, confined to the Round tone-color and in Perfect Balance.

Example 1



The instruments and tone-colors employed are as follows:

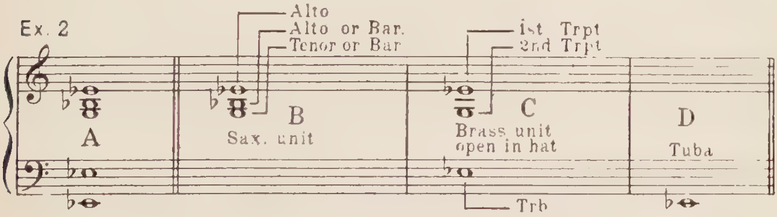
2 B♭ Trumpets—Open in Hat—Round tone-color.
Trombone—Open in Hat—Round tone-color.
2 E♭ Alto Saxophones—Low register—Round tone-color.
B♭ Tenor or C Melody Sax.—Low register—Round tone-color.
Tuba—

Measure A, shows the entire orchestral chord; measure B, shows the intervals of the chord and tone-color assigned to the Brass Unit. Note that the 1st Trumpet note is the melody. Measure D shows the bass note for the Tuba, and measure C shows the intervals of the chord assigned to the Saxophone Unit.

The Violin is omitted owing to its weakness in the Round tone-color register and Piercing tone-color of the upper register.

The Trumpet (Open in Hat) produces the same tone-color in all registers of the instrument, whereas the Saxophone does not. **Therefore,** if the melody note is to be assigned to the Saxophone, a Perfect balance in Round tone-color cannot be applied to the chord shown above. However, such a balance is possible, providing the melody note is in the low register of the Saxophone.

Ex. 2



The instruments and tone-colors employed are the same as those listed above, and the Violin is again omitted for the same reason as mentioned before.

Measure A, shows the entire orchestral chord; measure B, shows the complete triad assigned to the Saxophone Unit, of which the upper note is the melody note for the 1st Saxophone. Measure C, shows the intervals of the chord assigned to the Brass Unit, and measure D, the bass note for the Tuba.

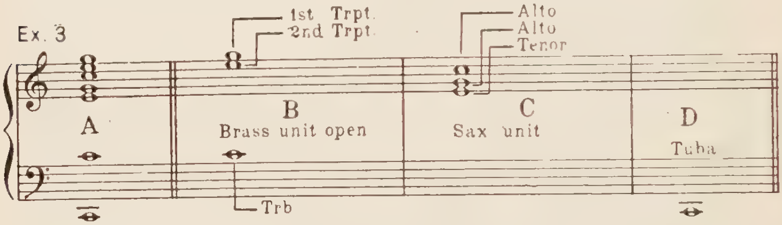
Note that the two Trumpets are doubled with two of the Saxophones. This is unavoidable, and creates no misbalance. The melody note when, in a low register, is always important enough to allow reenforcement.

This form of balance may include the E♭ Baritone Saxophone, which is of the Round tone-color in all registers. One or more Baritone Saxophones may be included in the Saxophone Unit when distributing harmony notes assigned in Round tone-color.

PERFECT BALANCE
IN
OPEN TONE-COLOR.

The next example is that of a C chord, confined to the Open tone-color and in Perfect balance.

Ex. 3



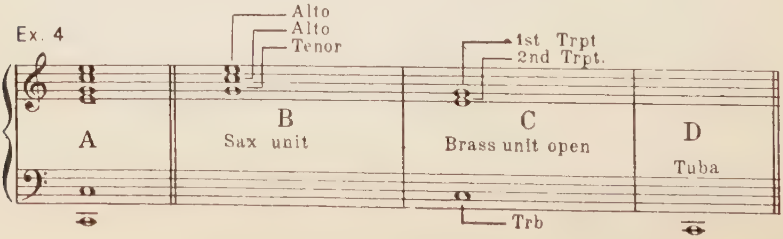
The instruments and tone-colors employed are as follows:

2 B♭ Trumpets—Open—Open tone-color.
Trombone—Open—Open tone-color.
2 E♭ Alto Saxophones—Middle register—Open tone-color.
B♭ Tenor, or C Melody—Middle register—Open tone-color.
Tuba—

Measure A, shows the entire orchestral chord; measure B, shows the intervals of the chord and tone-color assigned to the Brass Unit, and the complete chord, represented in Open position trio form. The first Trumpet note is the melody. Measure C, shows the triad assigned to the Saxophone Unit; and measure D, the bass note for the Tuba.

When confining the chord shown in measure A, to Open tone-colors, the Saxophone cannot be assigned to the melody note. If this were done, such melody note would be in the Piercing tone-color register of the instrument. When the Saxophone is to be assigned to the melody note, a Perfect balance can only be created in two ways. Either the melody note for the Saxophone must be in the tone-color desired, or the other instruments must be matched in tone-color to the Saxophone.

Ex. 4



The instruments and tone-colors employed are as follows:

2 E♭ Alto Saxophones—Middle register—Open tone-color.
B♭ Tenor or C Melody Saxophone—Middle register—Open tone-color.
2 B♭ Trumpets—Open—Open tone-color.
Trombone—Open—Open tone-color.
Tuba—

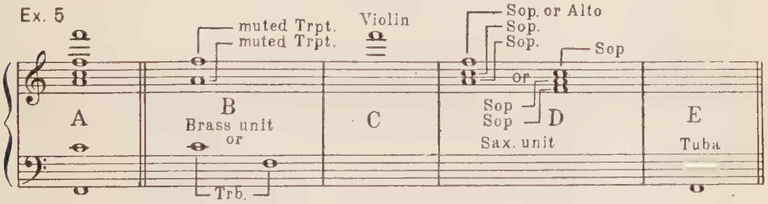
Measure A, shows the entire orchestral chord; measure B, the triad assigned to the Saxophone Unit; measure C, the intervals of the chord assigned to the Brass Unit, and measure D, the bass note for the Tuba. Note, that the notation for the Brass Unit in measure C, is one octave lower than the notation for the Brass Unit in Ex. 3, measure B. This is necessary, because when the melody note is to be assigned to the 1st Saxophone, then that instrument must represent the highest note of the concerted chord.

Up to this time the Violin has been omitted. This instrument can only be associated with the Piercing tone-color in Perfect balance, Composite and Full balance.

PERFECT BALANCE
IN
PIERCING TONE-COLOR.

The following example is that of a concerted chord in Piercing tone-color and Perfect balance.

Ex. 5



The instruments and tone-colors so far employed are as follows:

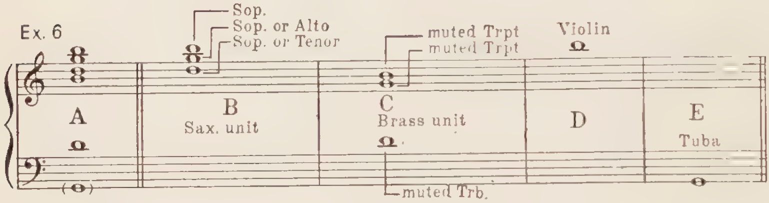
2 B♭ Trumpets—Muted—Piercing tone-color.
Trombone—Muted—Piercing tone-color.
Violin—Upper register—Piercing tone-color.
3 Soprano Saxophones—Piercing tone-color.

Measure A, shows the entire orchestral chord; measure B, shows the intervals of the chord assigned to the muted Brass Unit, and measure C, the melody note for the Violin. In adding the Saxophone Unit to this chord, it must be in the same tone-color. Therefore, the triads shown in measure D, can only be assigned to Soprano Saxophones. So far measures B, C and D, present a perfect balance in Piercing tone-color.

The bass note shown in measure E is missing and must be added. This can only be done by the Tuba in a different tone-color, which cannot be avoided.

The following example is that of another Concerted chord of the Piercing tone-color, in which the Saxophone is assigned to the melody note.

Ex. 6



The instruments and tone-colors so far employed are as follows:

B♭ Soprano Saxophone—Piercing tone-color.

B♭ Soprano or E♭ Alto Sax.—(Upper register)—Piercing tone-color.

Soprano or B♭ Tenor Sax.—(Upper register)—Piercing tone-color.

2 B♭ Trumpets—Muted—Piercing tone-color.

Trombone—Muted—Piercing tone-color.

Violin—Upper register—Piercing tone-color.

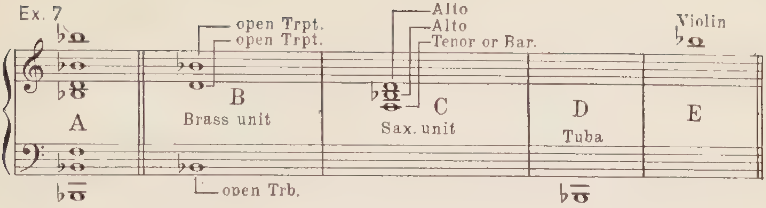
Measure A, shows the entire orchestral chord; measure B, the triad assigned to the Saxophone Unit; measure C, the intervals of the chord assigned to the muted Brass Unit, and measure D, the melody note for the Violin.

The Saxophone Unit must be assigned to the Piercing tone-color, obviously three Soprano Saxophones. However, the two lower notes of the triad may be assigned to the Alto and Tenor, these notes being in the Piercing tone-color register of those instruments. Measure E, shows the bass note which must be assigned to the Tuba.

Full Balance.

In full balance, only Open and Round tone-colors are concerned. In this form of balance they are combined. The Violin, although in the Piercing tone-color, must be added. This is on account of its value in augmenting the volume of the melody note. The following example is that of a B♭ chord, illustrated in full balance.

Ex. 7



The instruments and tone-colors employed are as follows:

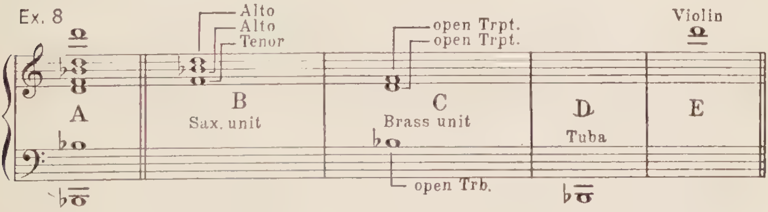
2 B♭ Trumpets—Open—Open tone-color.
Trombone—Open—Open tone-color.
Saxophone Unit—Low register—Round tone-color.
Tuba—

Measure A, shows the entire orchestral chord; measure B, shows the intervals assigned to the Brass Unit; measure C, shows the triad assigned to the Saxophone Unit; measure D, the bass note for the Tuba, and measure E, the melody note for the Violin.

In adding the melody note for the Violin, as shown in measure E, the Piercing tone-color of this instrument is unassisted, and, therefore, does not disturb the balance.

The following example is that of a Full balance concerted chord in which the Saxophone is assigned to the melody note.

Ex. 8



The instruments and tone-colors employed are as follows:

2 E♭ Alto, and 1 B♭ Tenor Sax.—Middle register—Open tone-color.
2 B♭ Trumpets—Open in hat—Round tone-color.
Trombone—Open in hat—Round tone-color.
Tuba—Round tone-color.
Violin—Upper register—Piercing tone-color.

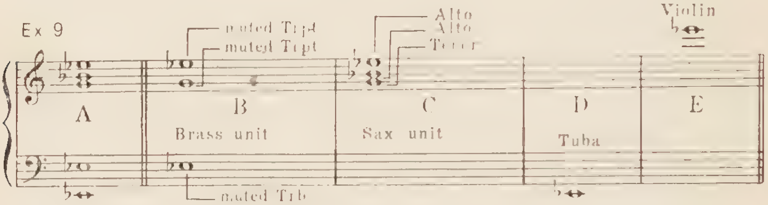
Measure A, shows the entire orchestral chord; measure B, the triad assigned to the Saxophone Unit; measure C, the intervals of the chord assigned to the Brass Unit; measure D, the bass note for the Tuba, and measure E, the melody note for the Violin.

As already stated the E♭ Baritone Saxophone may take part in producing the Round tone-color in the Saxophone Unit.

Composite Balance.

When scoring a Concerted chord, in Composite balance, the melody note must be in Composite tone-color, i. e., Piercing and Open tone-colors combined, or Piercing and Round tone-colors combined. This is illustrated in the following example.

Ex 9



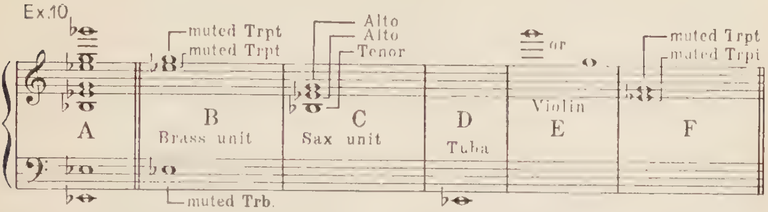
The instruments and tone-colors employed are as follows:

2 B♭ Trumpets—Muted—Piercing tone-color.
Trombone—Muted—Piercing tone-color.
2 E♭ Alto Saxophones—Middle register—Open tone-color.
B♭ Tenor Saxophone—Middle register—Open tone-color.
Tuba—
Violin—Upper register—Piercing tone-color.

Measure A, shows the entire orchestral chord; measure B, the intervals of the chord assigned to the Brass Unit; measure C, the triad assigned to the Saxophone Unit; measure D, the bass note for the Tuba, and measure E, the melody note for the Violin.

Note, that the Trumpet notes, including the melody, are doubled with two Saxophones, whereas, the Trombone is unassisted. The Piercing tone-color of the muted Brass Unit must be re-enforced by the Open or Round tone-colors, if a solid and sonorous effect is to be obtained. Therefore, in Composite balance, the Saxophone Unit, as shown in measure C, which represents the entire chord, is added to the Brass Unit. The Piercing tone-color of the Trombone is modified by the tone-color of the Tuba, an octave lower, thereby creating a form of Composite tone-color. The Piercing tone-color of the Violin exaggerates the tone-color of the muted Brass, but this does not disturb the balance. To the Concerted chord shown in the above example, a Composite balance can easily be applied. This is also possible when the melody note is in a low register, but, when the melody note is to be assigned to a muted Trumpet in a higher register, then the Duplex tone-color between the Trumpet and the 1st Saxophone cannot be obtained in the same manner. If the melody note were to be doubled in the same register with the 1st Trumpet, then the Saxophone would also be in the Piercing tone-color. How to overcome this is shown in the following example.

Ex.10

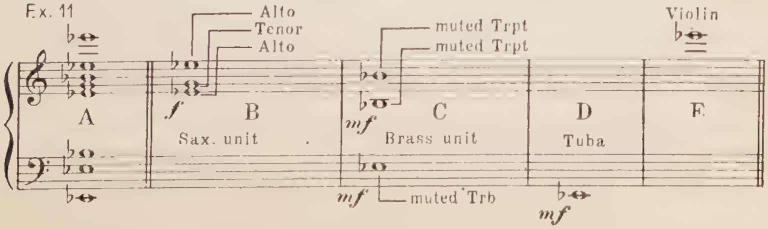


The instruments and tone-colors employed in the above example are as follows:

2 B♭ Trumpets—Muted—Piercing tone-color.
Trombone—Muted—Piercing tone-color.
1st E♭ Alto Saxophone—Middle register—Open tone-color.
2nd E♭ Alto Saxophone—Low register—Round tone-color.
B♭ Tenor—Low register—Round tone-color.
Tuba—
Violin—Piercing tone-color.

In the example shown above, the melody note is assigned to the muted Trumpet, as shown in measure B, in the high register of the instrument. The melody note is also assigned to the 1st Saxophone of the Saxophone Unit, shown in measure C, but an octave lower than the Trumpet. This also creates a form of Composite tone-color on the melody note. The entire chord is represented in the Saxophone Unit, and the bass note written for the Tuba, in measure D, combined with the Saxophone Unit, creates a Perfect balance. The melody notes for the Violin, shown in measure E, are optional. The high G, to be written in conjunction with measure B, and the low G, to be written in conjunction with measure F. Measure F, may also be written for the two Trumpets. When doing this, the Saxophone Unit remains as shown in measure C. This also illustrates how a Composite balance can be scored in a lower register. Another form of Composite balance may be scored in which the Saxophone plays the melody note, unassisted by a Trumpet.

Ex. 11



The instruments and tone-colors employed are as follows:

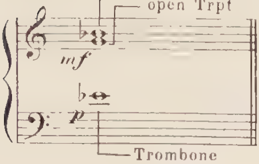
2 E♭ Alto Saxophones—Middle register—Open tone-color.
B♭ Tenor Saxophone—Middle register—Open tone-color.
2 B♭ Trumpets—Muted—Piercing tone-color.
Trombone—Muted—Piercing tone-color.
Tuba—
Violin—Piercing tone-color.

Measure A, shows the entire orchestral chord; measure B, shows the intervals of the chord assigned to the Saxophone Unit. Note that the Fifth of the chord, B♭, is omitted, and that the melody note is doubled in octaves. Measure C, shows the intervals of the chord assigned to the Brass Unit. The two Trumpets are assigned to octaves, and on the Fifth of the chord, B♭, which is omitted in the Saxophone Unit. Measure D, shows the bass note for the Tuba, and measure E, shows the melody note for the Violin. In this instance a Composite tone-color is created on the melody note between the first Saxophone, Open tone-color, and the Violin, an octave higher, in Piercing tone-color. The melody note for the 1st Saxophone, as shown in measure B, is near the Piercing tone-color register, but this is modified by the tone-color of the melody note, assigned to the Saxophone, an octave lower. This manner of scoring balance depends greatly on how it is played. It is necessary that the Saxophone Unit plays a little stronger in volume than the Brass Unit, so that the Fifth of the chord, assigned to the two Trumpets, is not too prominent. This can be controlled by *dynamics*.

FALSE BALANCE.

False balance is produced by the use of dynamics. However, this rule is subjected to other conditions. It must be remembered that *dynamics* control the volume, and not the tone-color of an instrument. The upper tones of an instrument are stronger in volume than the lower. Therefore, if high tones are to be scored, so as to balance with low tones, then *dynamics* must be used so as to equalize the volume. For instance, if in a concerted chord, a note is to be assigned to the Trombone in the high register, and two notes are to be assigned to the Trumpets in middle register, the volume of the Trombone will be somewhat stronger than that of the Trumpet. To overcome this, the Trombone note should be indicated (*p*), and the Trumpet notes indicated (*mf*).

Ex. 12



This form of balance can be applied in many ways too numerous to illustrate in the same manner as were the others. False balance is not practical when applied to Concerted chords, but when scoring ensembles, it plays an important part in creating ensemble balance.

The forms of balance illustrated and explained in this chapter are fundamental. Each of the forms is flexible, and, therefore, may be altered to fit requirements. It is hardly possible to explain by word the exact sound of an instrument, but the theories on balance set forth above are based on practical knowledge.

In the following chapter, which deals with ensembles, different forms of balance are illustrated and explained.

Chapter XXI

ENSEMBLES

In chapter XIX, the Saxophone, Brass and Rhythmic Units were combined and scored in such a manner that two different musical thoughts were expressed simultaineously. This manner of scoring creates a semi-ensemble effect, and may be properly called ensembles. The term "ensembles," as applied to the manner of scoring, shown and explained in this chapter, refers to the employment of all the instruments of the dance orchestra, united in expressing *one* musical thought.

Ensemble effects may be used for introduction and opening strains. They may also be used in the middle of an arrangement when a color or characteristic effect requires the employment of the entire orchestra. Ensemble effects usually appear at the end of an arrangement, and are scored in such a manner that the entire orchestra is united in fully expressing the theme and harmonization of the composition.

Tone-color and Balance in Ensembles

In chapter XX, it was explained how tone-color and balance are applied to concerted chords. The methods described for scoring such, are also employed for applying tone-color and balance to ensembles. However, there is a slight difference in the manner of scoring. In concerted chords, the Tuba or Bass Violin is an important factor in fully completing the balance, whereas, in nearly all ensembles, the Tuba or Bass Violin is required to play a rhythmic bass. Obviously, a balance must be obtained in ensembles without depending on the Tuba, and remains to be accomplished by the Saxophone and Brass Unit, plus the Violin. However, there are exceptions to this rule, but they only concern the Tuba or Bass Violin. The most important of these is the creation of an "organ" effect, which requires a sustained bass. This will be further explained later.

Ensembles may be scored in any tone-color, but in view of the fact that ensembles should be scored in one which will produce an appropriate effect, the selection of tone-color must be carefully made. As stated in a previous chapter, the combination of tone-colors associated with Full balance represent the backbone of the dance orchestra. It has also been stated that Composite balance acts as a successful substitute for Full balance when the Brass Unit, unavoidably must remain muted. These facts indicate that ensembles, which demand volume, should be scored in Full or Composite balance whenever possible. Not only are these forms of balance appropriate, but they also give the arranger freedom to employ the full range of each instrument. Scoring in Perfect Open or Perfect Round tone-color balance restricts the arranger to one register of the Saxophones. However, an ensemble may be scored in Perfect Piercing tone-color balance without such limitations. Such balance is easily obtained by employing Soprano Saxophones and muted Brass. For final ensembles, Full or Composite balance is to be prefered.

Phrasing Ensembles

Phrasing is an important factor in ensembles. The style of phrasing governs the manner in which the notation is to be written, and also classifies ensembles. There are two distinctly different ways of phrasing an ensemble: *marcato* and *legato*. *Marcato* phrasing creates a forceful, stirring and definite effect. *Legato* phrasing creates a smooth, sonorous and expressive effect, and when applied to an ensemble, fully brings out the harmonic structure.

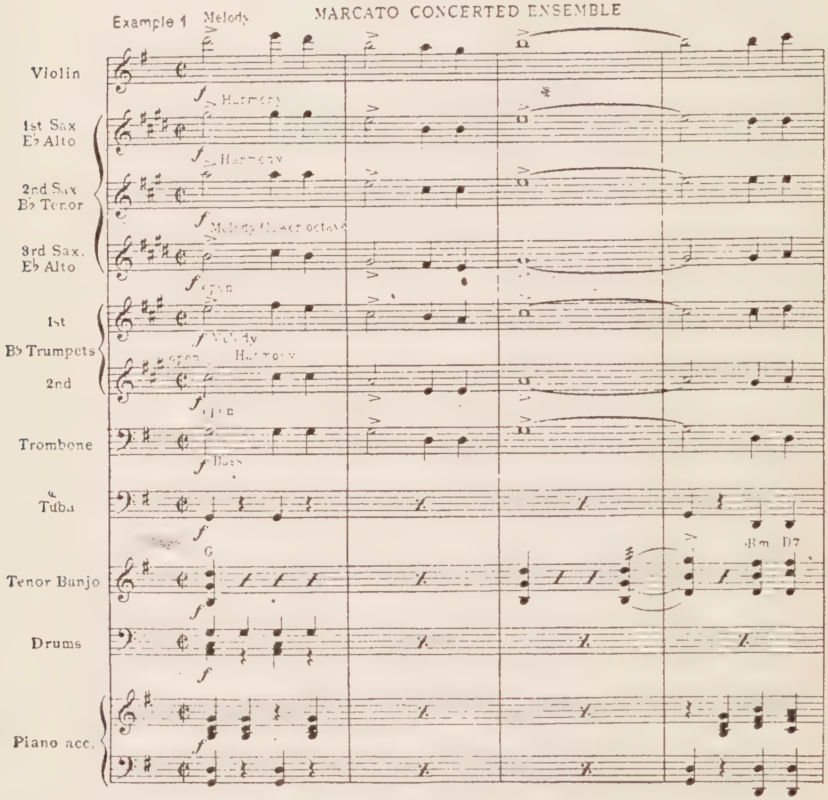
When combining phrasing, tone-color and balance, their combined effect should be in keeping with the character of the composition. For instance: If the character of the composition is extremely rhythmic, and a final ensemble is to be scored, a Full or Composite balance combined with *marcato* phrasing will produce a proper effect. On the other hand, if the character of the composition is smooth in nature, then the same form of balance, combined with *legato* phrasing will produce a proper effect. Such applications of balance and phrasing to ensembles are the obvious things to do, but they should not be followed as an unbreakable rule. Smooth melodies may also be scored for *marcato* phrasing, if a special effect is desired. Sometimes *marcato* and *legato* phrasing may be used intermittently with excellent result.

Concerted Ensembles

Marcato phrasing is naturally such as to bring all the instruments of the orchestra together in exact rhythmic step with the melody, as shown in Ex. 1. In this score the instruments of the Saxophone and Brass Unit, also the Violin, are written rhythmically alike, which clearly illustrates what is meant by Concerted ensemble. This score also illustrates what has been stated in reference to balance without the aid of the Tuba.

Legato phrasing also holds the instruments of the orchestra together, but not necessarily in exact rhythmic step with the melody. The sustaining of the melody permits the inner harmonies to be moved around within the limitations of the harmonic structure and *legato* phrasing. On the other hand, the inner harmonies may be sustained while the melody moves, as shown in Ex. 2.

Example 1 MARCATO CONCERTED ENSEMBLE



The two types of ensembles, which have just been described, have been defined as "Concerted" ensembles, viz.:

Marcato Concerted Ensembles.
Legato Concerted Ensembles.

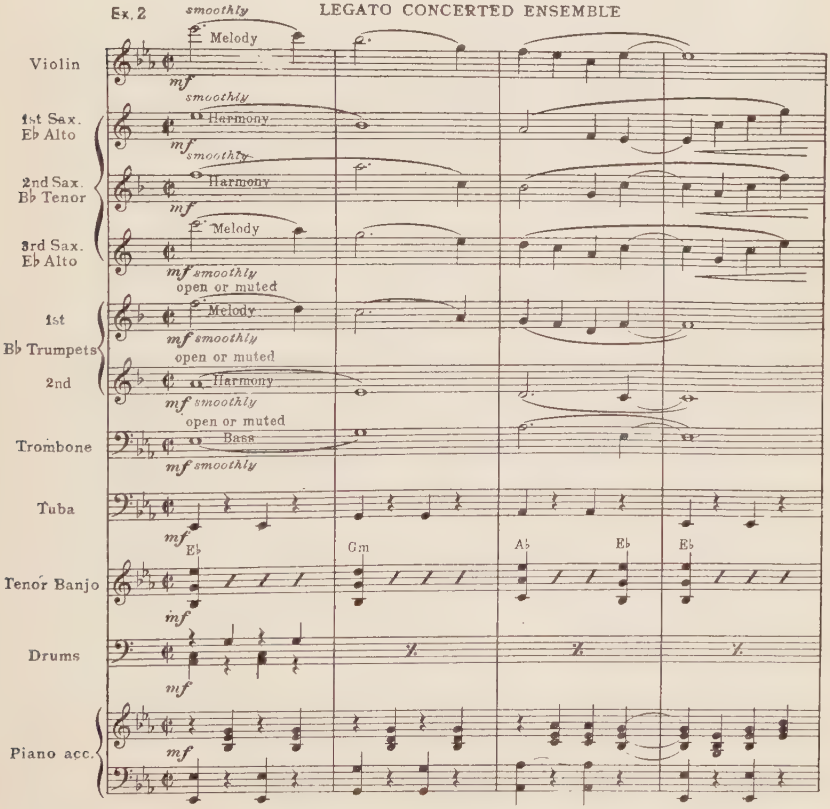
Obligato Ensembles

The method just described is not the only manner in which *Marcato* or *Legato* Concerted ensembles may be scored. There is another form of rhythmic treatment possible, which may be used with good effect. This refers to "obligato" ensembles, which are different from those already cited. Such ensemble may also be in *marcato* or *legato* phrasing, and consequently introduces two different forms, viz.:

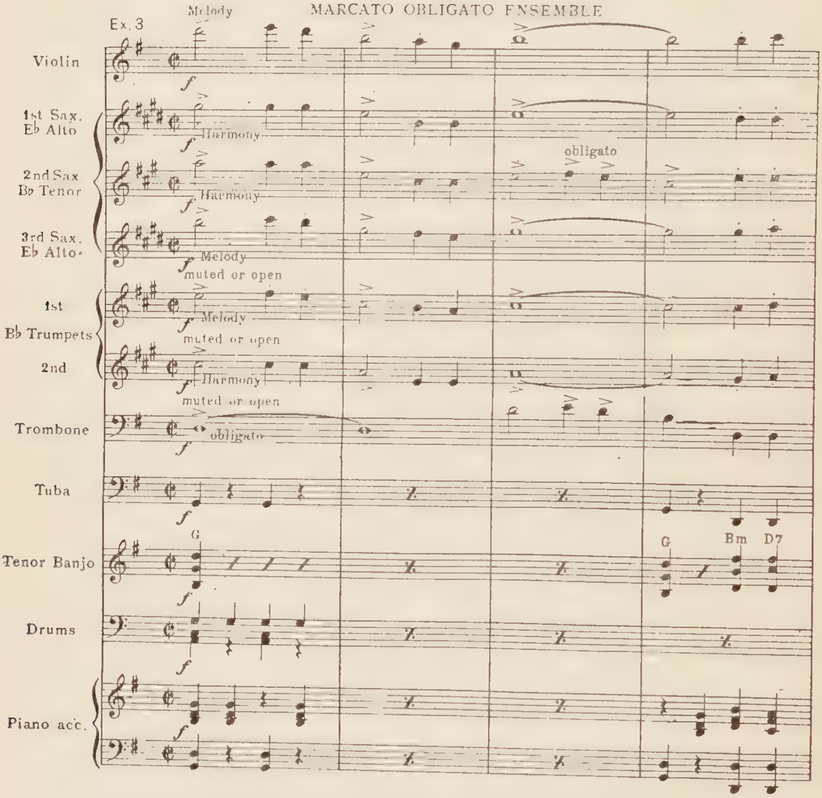
Marcato Obligato Ensembles.
Legato Obligato Ensembles.

In an Obligato ensemble, whether *marcato* or *legato,* one or more instruments may be assigned to an obligato or counter-melody which fits the harmonic structure. This is illustrated in Exs. 3, 4 and 5. In Exs.

Ex. 2 LEGATO CONCERTED ENSEMBLE



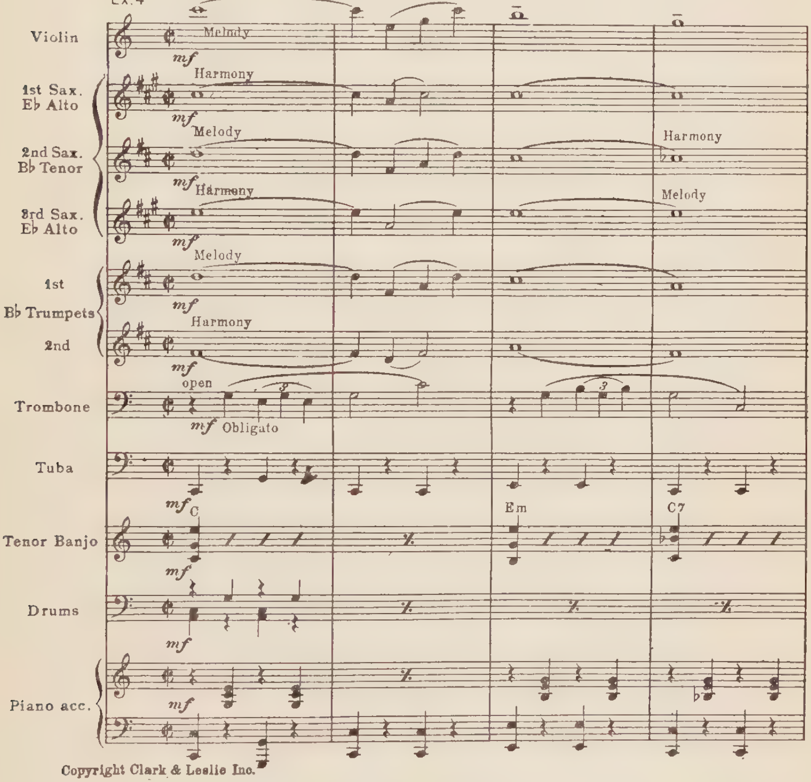
3 and 4, the Trombone is the only instrument assigned to an obligato, whereas in Ex. 5, both Trombone and Tenor Saxophone are assigned to a counter-melody, which is an imitation of the theme. When assigning more than one instrument to an obligato, the balance must be considered and the melody not covered. When an obligato is to be written for the Alto Saxophone, which is to sound above the melody, then the Tenor Saxophone should be assigned to the melody. A very effective Obligato



Ensemble is obtained by assigning two Saxophones (Alto and Tenor) to an obligato, scored in octaves, and then assigning the first Trumpet and Trombone (open) to the melody, in octaves. To this the third Saxophone (Alto) and second Trumpet (open) are added and assigned to inner harmonies, in the same rhythmic step as the melody.

LEGATO OBLIGATO ENSEMBLE

Ex. 4



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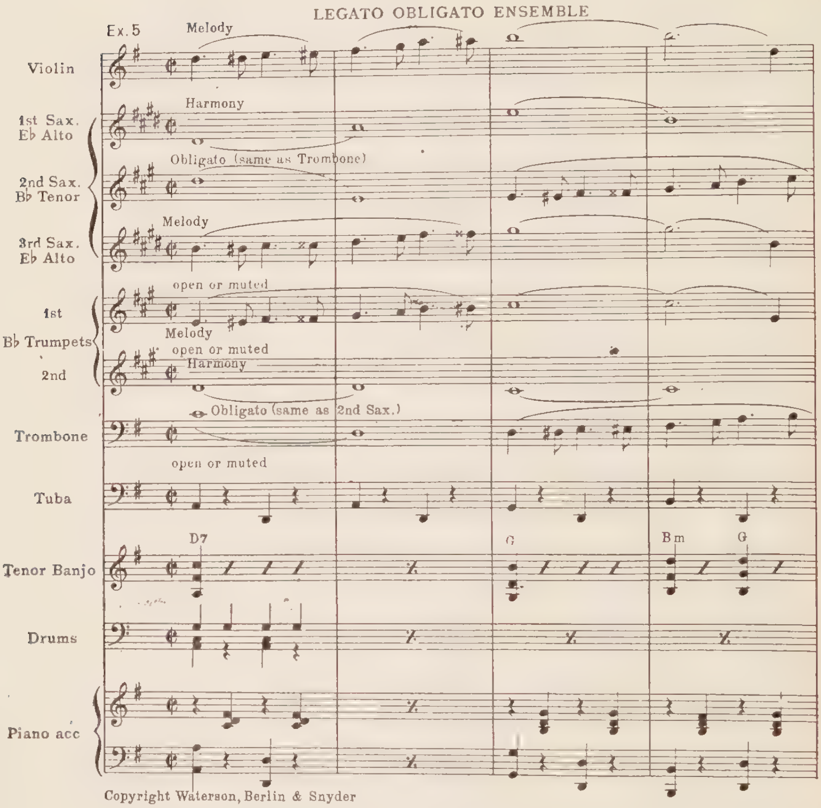

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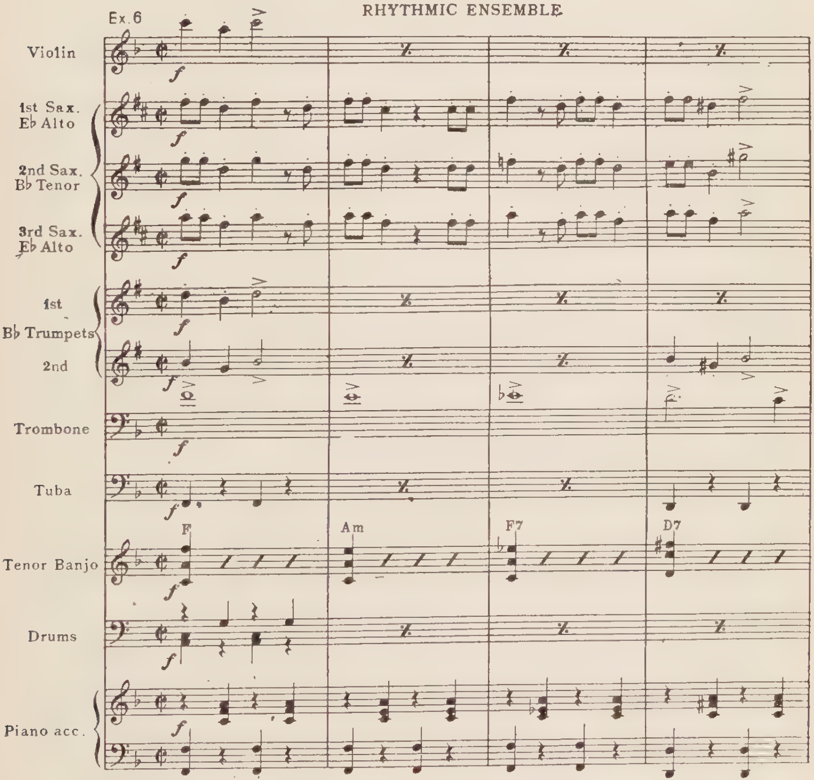
Rhythmic Ensembles

In Rhythmic ensembles, figurations for the Saxophone Unit are the main reason for classifying ensembles as such. Ex. 6 shows a very effective way of scoring a Rhythmic ensemble. The Violin and first Trumpet are assigned to the melody, in octaves, and the second Trumpet is assigned to harmony, concerted with the first Trumpet. The Saxophone Unit is assigned to a rhythmic figuration, in three-part harmony, while the Trombone is assigned to a counter melody. This counter-melody is an important harmonic effect, and is part of the original composition, which, in the score, is well represented by the Trombone. The notation for the Saxophone Unit is in condensed form. In this particular instance, the third Saxophone (Alto) is doubled with the melody, but rhythmically, is the

Ex. 6

RHYTHMIC ENSEMBLE



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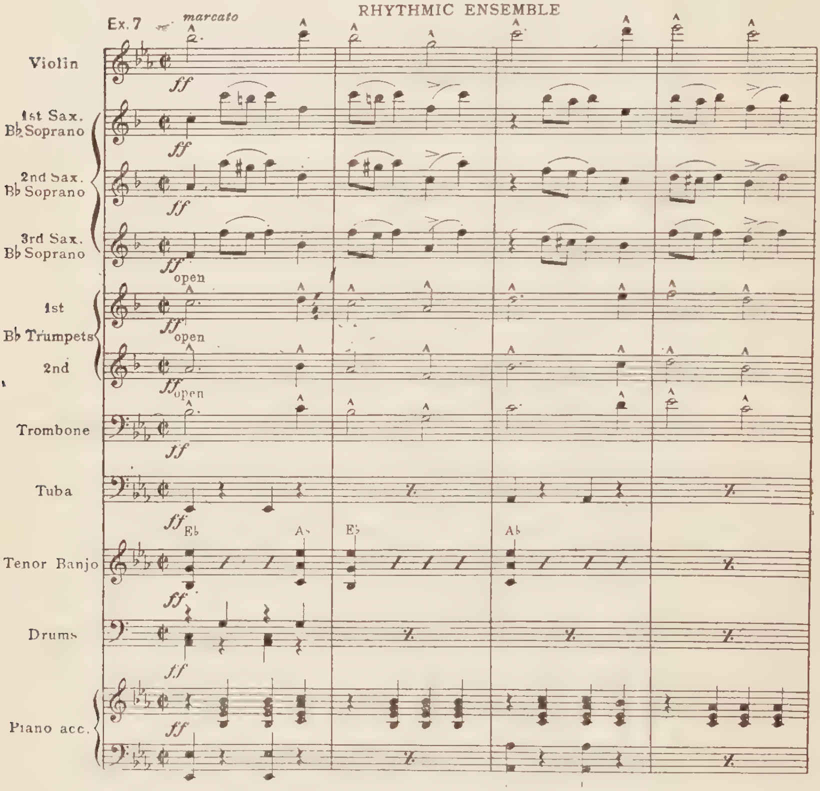
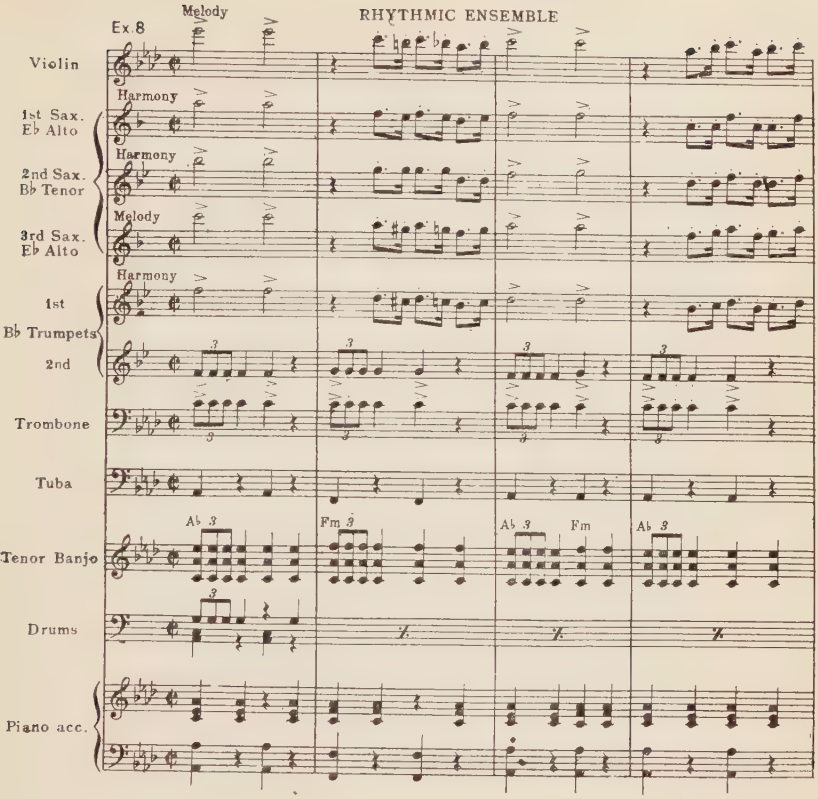
same as the first and second Saxophones. By doing this, the melody notes are re-enforced when the third Saxophone is present, and the first and second Saxophones, although rhythmic, complete the harmony when the third Saxophone is absent.

Ex. 7



Ex. 7 shows another score of a Rhythmic ensemble, similar in style to that of Ex. 6. However, there is a difference in instrumental color. The Saxophone Unit consists of three Soprano Saxophones and the first Trumpet is assigned to the melody, in octaves with the Trombone.



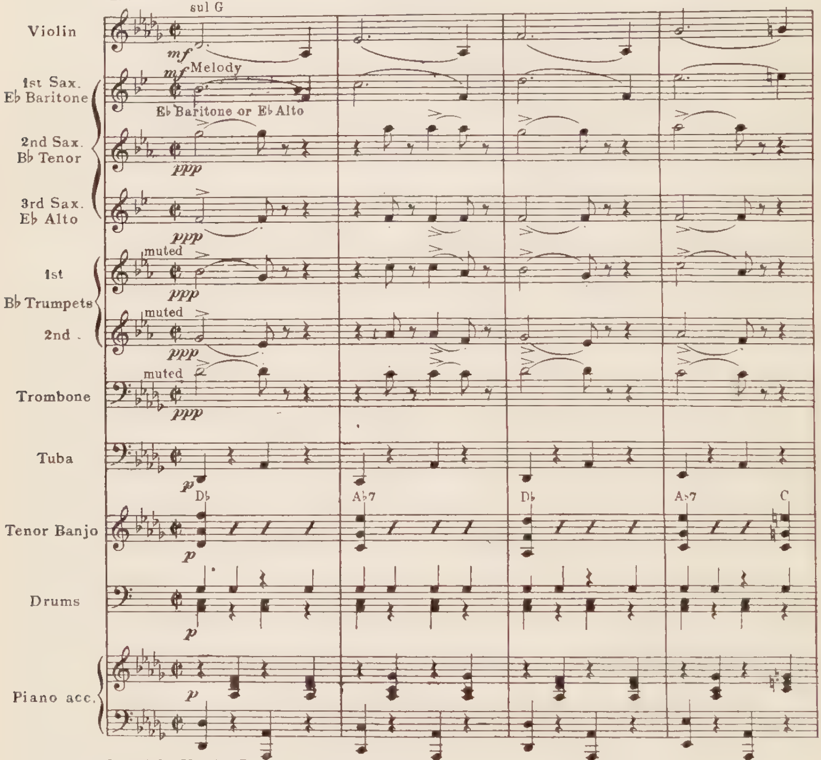
Ex. 8 presents a more interesting form of Rhythmic ensemble. In this score, the theme is carried by the Violin, first Trumpet and third Saxophone (Alto). This is harmonized by the addition of the second and third Saxophones (Alto and Tenor), which are rhythmically concerted with the melody. To this, a very effective rhythm is added, which is assigned to the second Trumpet, Trombone and Tenor Banjo. The first Trumpet is open, while the second Trumpet and Trombone are muted. This is done so that those instruments, which are associated with the melodic rhythm, will be different in tone-color from those instruments associated with the counter-rhythm. The Plectrum tone-color of the Tenor Banjo and Piercing tone-color of the muted brass blend, and bring out the counter rhythm in a contrasting tone-color.

Rhythmic "Solo" Ensembles

There is another form of Rhythmic Ensemble which is different from those already quoted. This is the Rhythmic Solo Ensemble, as shown in Ex. 9 .

Ex. 9

RHYTHMIC SOLO ENSEMBLE



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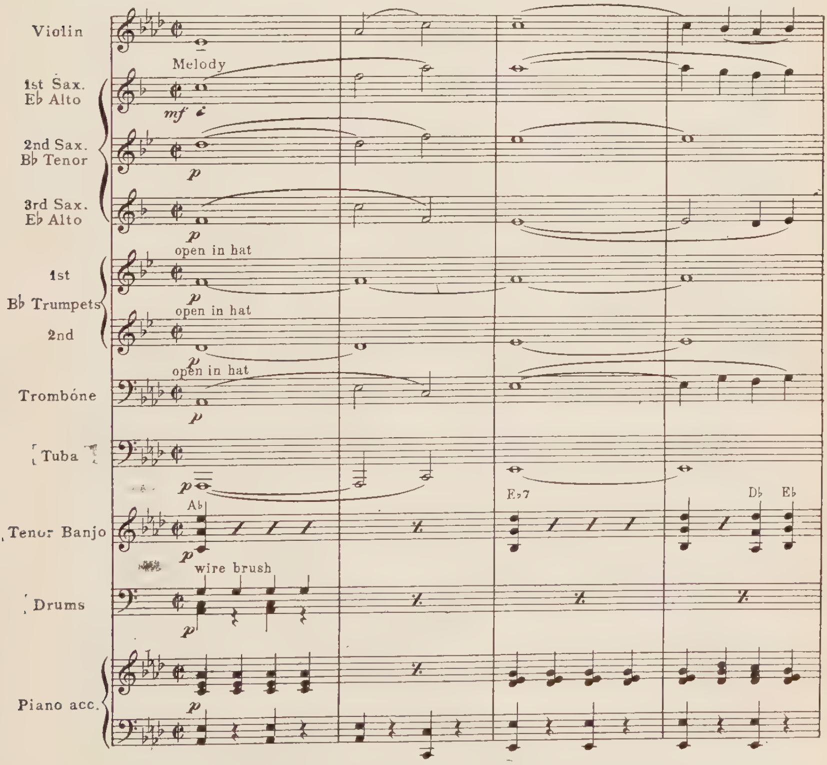
In such ensembles, the melody may be assigned to any one or two instruments, as a *solo* or in *unision.* To this a concerted inner-rhythm is added. This inner-rhythm should be different from that of the melody, and assigned to those instruments of the Saxophone and Brass Unit, which are not engaged with the melody. In conjunction with all this, the Rhythmic Unit maintains a strict rhythm only. The inner-rhythm may be harmonized in as many harmony parts as desired.

Ex. 9 shows a score of a Rhythmic Solo Ensemble, in which a Baritone Saxophone and a Violin are assigned to the melody. The inner-rhythm is scored in Composite balance, which is the most effective in this instance. When creating rhythms to be used as an inner-rhythm, they should be more or less melodic as well as rhythmic, and when adjusted to the melody and harmonic structure of the composition, at least two voices should move from one note of the chord to another. Inner-rhythms may also be scored for Soprano Saxophones and muted Trumpets, while the Trombone (open thru megaphone) carries the theme. There are many other ways of scoring a Rhythmic Solo Ensemble, which experimenting will disclose.

Rhythmic Solo Ensembles, if well constructed and properly balanced, produce excellent dance rhythm.

Ex. 10

ORGAN EFFECT



Effect Ensembles

As already stated, ensembles may be employed in the middle of an arrangement. This refers to Effect ensembles, which includes the following:

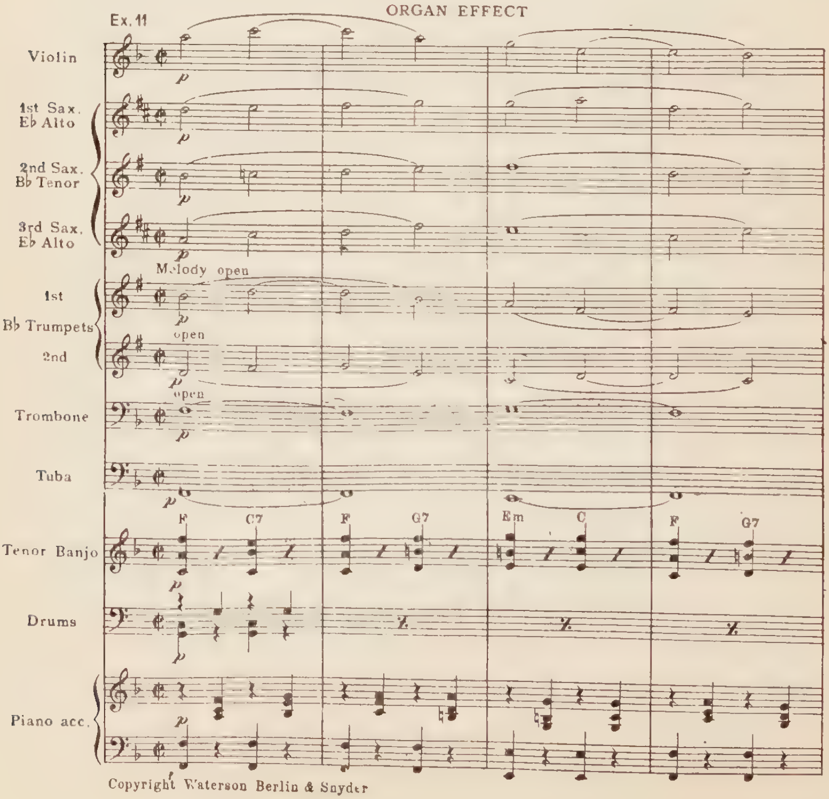
Organ Effects..
Characteristic Effects.
Color Effects.

Organ Effects

Organ effects are created by scoring for the instruments, in such a manner that an imitation of an Organ will result. In scoring, the Tuba must be included in the effect as shown in Exs. 10, 11 and 12.

The Organ effect shown in Ex. 10 is one in which the first Saxophone (Alto) and Violin are assigned to the melody. The Violin doubles with the first Saxophone.

Ex. 11



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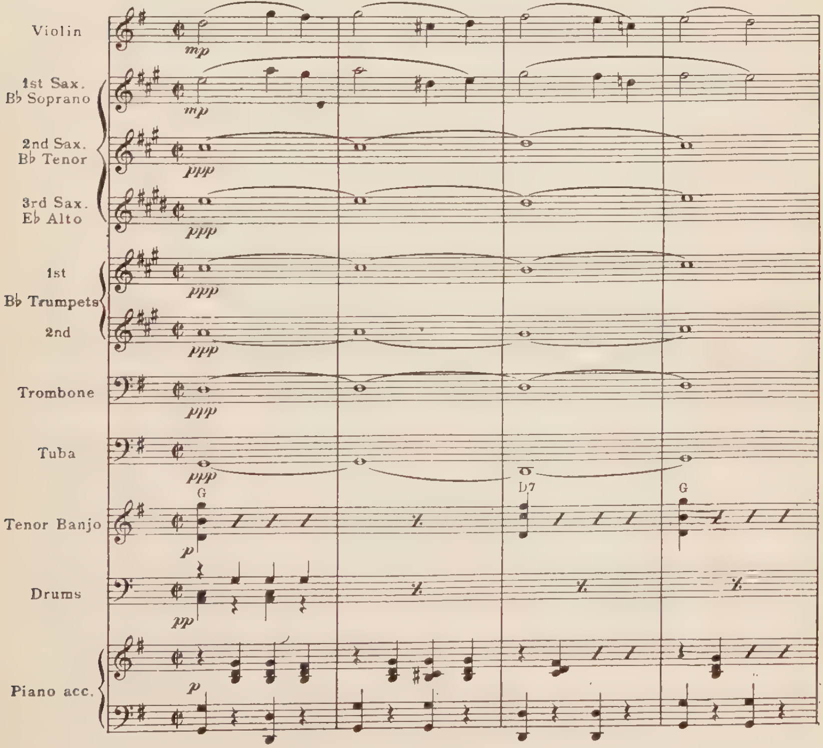
When scoring an Organ effect in such manner, it is important that the melody be not obscured by the pitch or tone-color volume of the other instruments. For this reason the Brass Unit should be assigned to the Round tone-color (open in hat) and in pitch sound below the melody. The second and third Saxophones (Tenor and Alto) should, in pitch, also sound below the melody. The dynamic markings should indicate that the melody is to be played louder than the harmony parts.

It is important that the Piano, Tenor Banjo and Drums maintain a strict rhythm only.

Ex. 11 presents another way of scoring an Organ effect. In this score the melody is assigned to the first Trumpet and Violin, in octaves. In this instance, the harmony part assigned to the first Saxophone, in the third and fourth measures, sounds above the first Trumpet, but will not cover the melody, because the natural volume of the open Trumpet will

Ex.12

ORGAN EFFECT



penetrate through the entire ensemble.. Being that the Violin sounds above the first Saxophone, doubly insures that the melody will stand out prominently.

Ex. 12 shows still another way of scoring an Organ effect. In this score the melody is assigned to a Soprano Saxophone and the Organ effect written so as to sound below the melody.

When scoring an Organ effect, it is not necessary to double the Violin with the melody. Such is only done as a guide to the director, who may play the part, if he so wishes.

In scoring for the Saxophones for an Organ effect, the absence of the third Saxophone must be considered, and the first and second Saxophone parts so arranged that the Organ effect will still be complete without the third Saxophone.

CHARACTERISTIC EFFECTS

Effects may be scored for the dance orchestra which are distinctive of a nationality, such as:

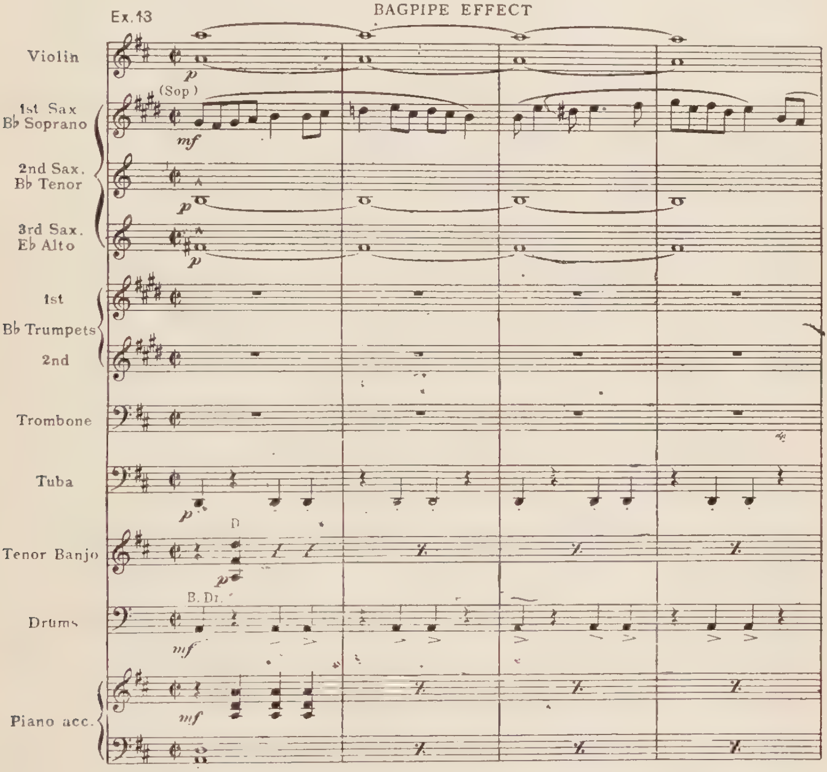
Oriental.
Irish or Scotch.
Indian.
Chinese.
Italian.
Russian.
Jewish, etc.

Such have been defined as Characteristic effects. When scoring such effects, it is not necessary to employ the entire orchestra in ensemble form. Only those instruments which are necessary to produce the effect desired should be scored for.

Ex. 13 shows a "bag pipe" effect, which is typically Irish. In this score, the Violin and Saxophone Unit are only necessary to produce the effect. The melody, which is an Irish jig, is assigned to the first Saxophone (B♭ Soprano), while the Violin, second and third Saxophones are engaged in playing one note, sustained in four octaves, which produces an imitation of the "drone" of the bag pipe. It should be stated that the "drone" of a bag pipe is always *A*, and sounds in four octaves as described above. In order to give a good imitation of a bag pipe, this peculiar characteristic of the bag pipe should be retained when scoring. Therefore, to do this, a key for a bag pipe effect must be selected in which *A* is either the *tonic* or the *fifth* of the *diatonic* scale, i. e., in the key of *A*, *A* is the *tonic*, and in the key of *D*, *A* is the *fifth*. Therefore, in either of these two keys, a bagpipe effect should be scored, even if it is necessary to modulate to such keys. The Bass Drum rhythm, as shown in Ex. 13, is very characteristic and may be used if desired. However, the Tuba should be doubled rhythmically with the Bass Drum and assigned to the key note.

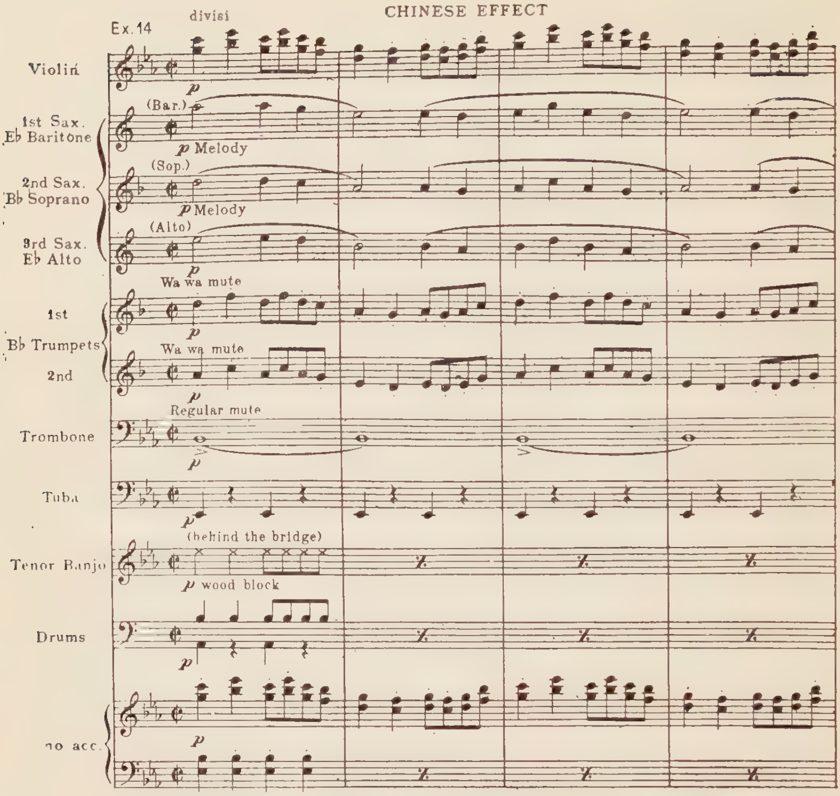
Ex. 14 shows the score of a "Chinese" effect. By carefully studying this score, it will be noticed that *fourths* are prevalent. This is a peculiar characteristic, distinctive of Chinese music.

Ex. 13



Ex. 14

CHINESE EFFECT



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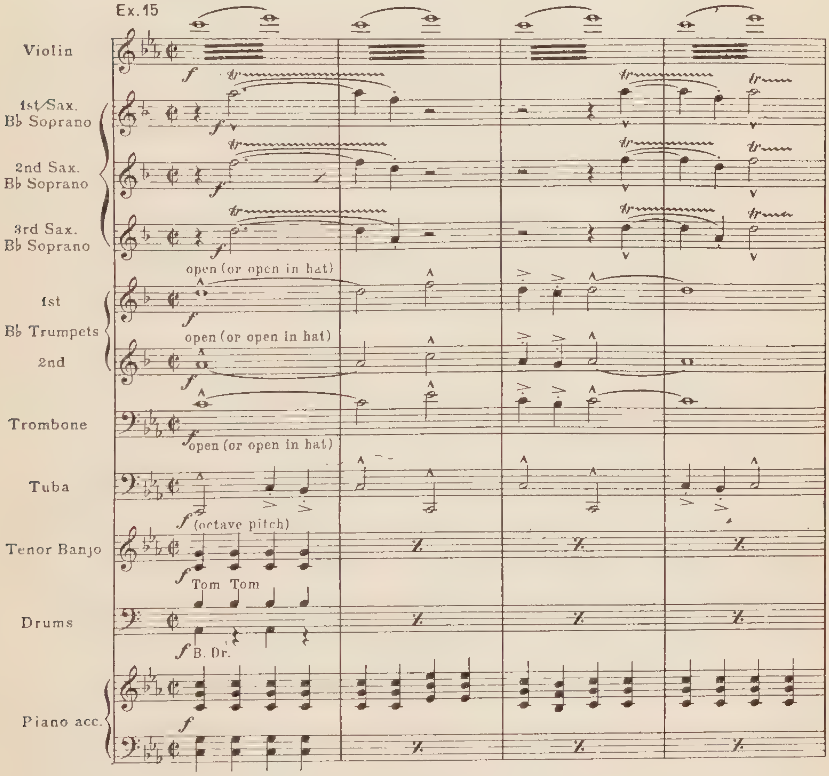
In this score, the theme is assigned to the first Saxophone (E♭ Baritone) and second Saxophone (B♭ Soprano), in octaves. This is harmonized by the third Saxophone (E♭ Alto) in *fourths* with the second Saxophone. To this is added a figuration harmonized in *fourths* in a rhythm different from that of the melody. This rhythm is assigned to both Trumpets with wa-wa mutes; upper register of the Piano, and two Violins. The absence of the second Violin will not harm the effect. The Trombone (regular mute) is assigned to a sustained note, which is the *fifth* of the chord. In further characterizing this effect, the Tenor Banjo is directed to pluck with the pick behind the bridge. This does not create any harmonic effect, but does add characteristic value, which is augmented by the employment of a "wood block" played by the Drummer.

Example 15 presents a score of an "Indian" effect. In this score the Indian yell is imitated by occasional trills, written for the three Soprano Saxophones in three-part harmony. The theme is carried by the open Brass Unit; first Trumpet and Trombone (melody in octaves) and second Trumpet harmonized in *fourths* with the first Trumpet. The Tuba is assigned to an independent part. To this the "tom tom" is added.

Another Indian effect, different from the described, is shown in chapter XVII, Ex. 26, in which an Indian "flute call" is imitated on the Piano.

INDIAN EFFECT

Ex. 15

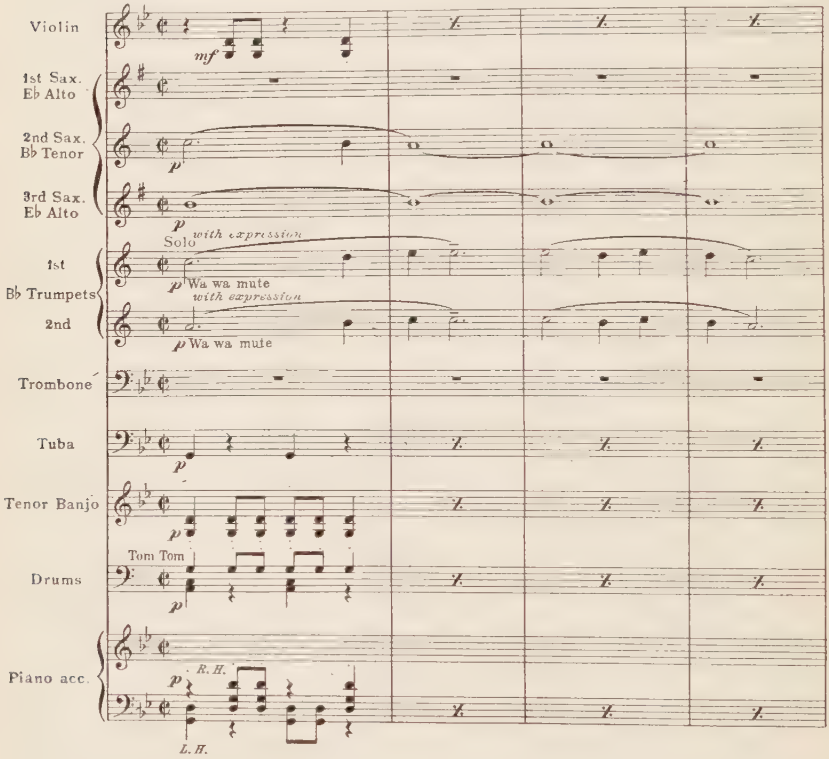


Oriental Effects

The scoring of Oriental effects depends upon the character of the melody. A slow moving melody requires a different instrumental treatment than a fast moving melody. Such color effects as Muted Trumpet (wa-wa or kazoo mute), Soprano Saxophone or Oboe, if available, may be freely employed.

Ex. 16

ORIENTAL EFFECT



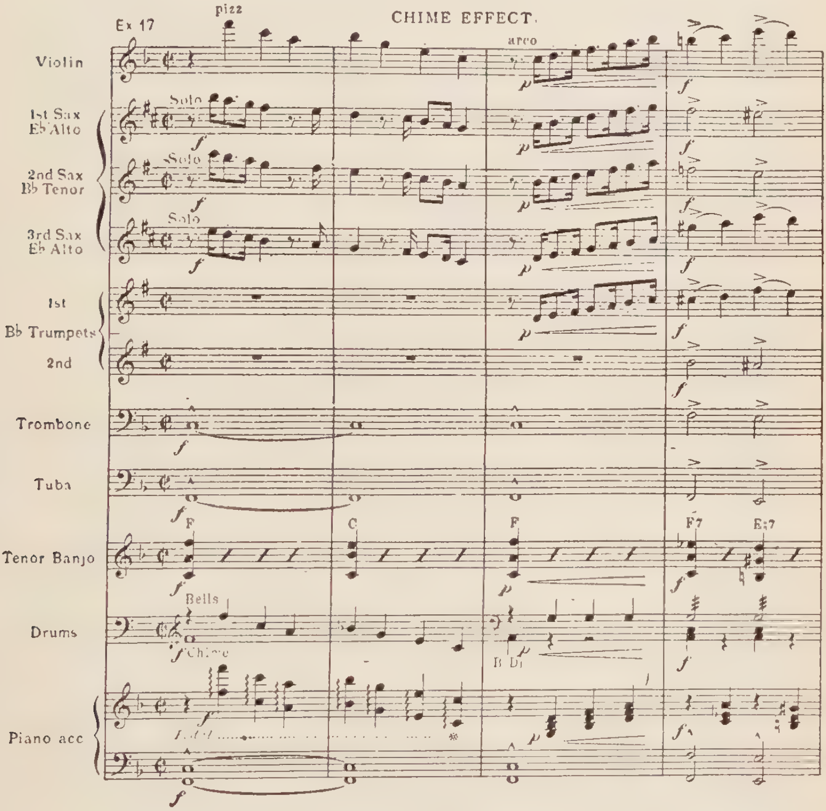
Ex. 16 shows a score of an Oriental effect, which employs two Trumpets with wa-wa mute, and two Saxophones, which are scored in quartet form. To this is added an Oriental Rhythm, characteristic of Oriental drums.

CHIME EFFECTS

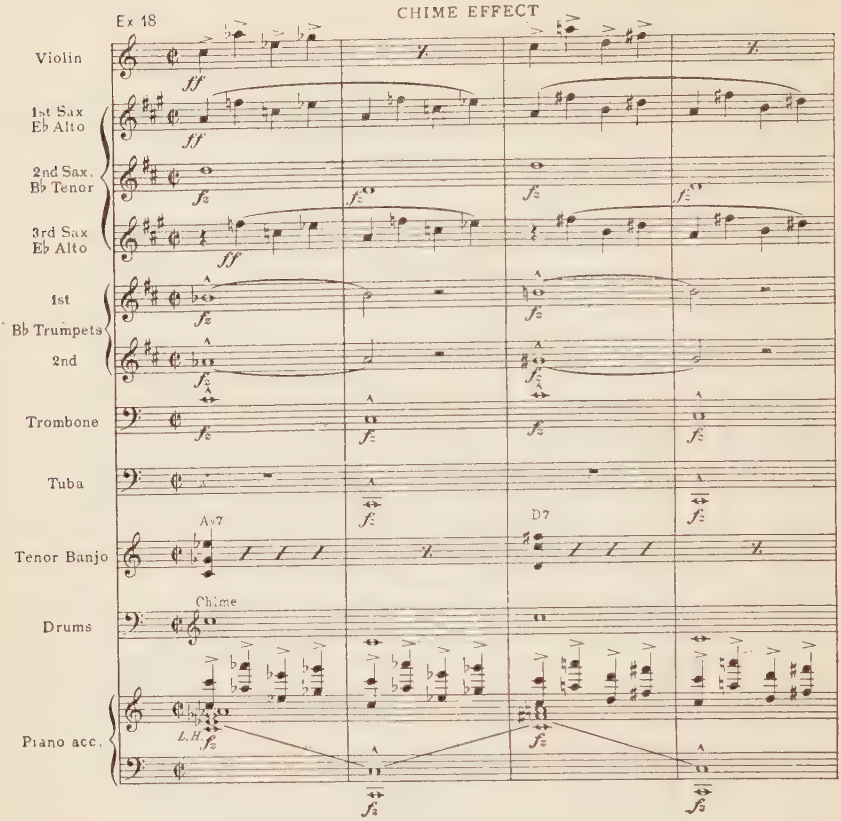
Chime effects can be produced in many different ways. Such effects can only be scored in such a manner as to give a suggestion of Chimes. Without the use of actual Chimes or bells, a Chime effect will be indefinite. However, it has been explained how a Chime effect may be produced on the Piano, which should be taken advantage of.

Exs. 17 and 18 show scores of unusual Chime effects, which should be analyzed.

Ex 17



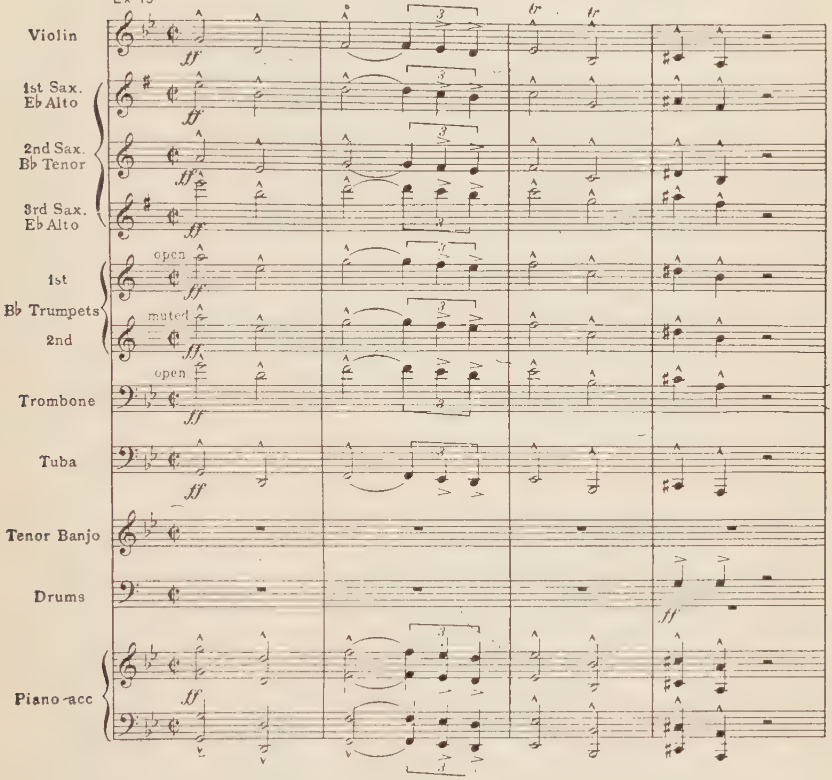
Ex 18



Another Oriental effect is shown in Ex. 19. This is the introduction of the Rhythmic Paraphrase, "Fantasie Oriental," which illustrates a point which so far has not been mentioned. This is a *concerted unison.* In the score, the actual pitch of the instruments are shown in the Piano part. The Saxophone Unit is assigned to three different octaves, and the Tuba is assigned to the lower octave, which combined with the Saxophones, creates a four-octave unison. This in itself completes the actual pitch notation shown in the Piano part. However, in order to produce the volume required for such an introduction, the Brass Unit must be added. In the score, this is done by doubling the first and second Trumpets on the same notes, but in different tone-color. The first Trumpet is open and the second Trumpet is muted. This will give the general effect of the entire introduction the proper sting. The Trombone (open) is added an octave below the Trumpets, creating an interval of two octaves between the Trombone and Tuba. The intermediate octave is well represented by the second Saxophone (B♭ Tenor), which is in the low register, as written in the score, and is voluminous enough to create an equal balance in all the octaves.

Ex 19

UNISON EFFECT



Resumé

With the closing of this chapter, all the important instrumental effects have been cited, and the manner in which they may be scored explained and illustrated. With a thorough knowledge of the aggregate as a working basis, the beginner should be well prepared to make arrangements. However, before attempting this, it is necessary to know how arrangements are constructed. This subject is dealt with in chapter XXV, "Form and Routines."

CHAPTER XXII

SCORING

The correct system of working out an arrangement is by scoring. A score presents to the eye the entire construction of each measure and shows at a glance exactly the parts assigned to each respective instrument. Before scoring, the form of the arrangement and all effects to be included, should be generally constructed in the mind. These are worked out in detail when scoring.

In constructing a score, each staff represents an instrument, at the beginning of which the name of the instrument is indicated. With the exact amount of instruments to be scored for in mind, the number of staves to be used should be ruled out for the entire length of the arrangement, leaving enough space between the bar lines so that eight *eighth-notes* may be inserted without difficulty. After the score has been ruled, the name of the instruments, and the key signatures of the same, are placed at the beginning of each page. This should be done, so that there will be no confusion or mistakes in extracting each individual part. It is advisable to score in lead pencil so that changes or mistakes can easily be erased.

Scoring may be done in two different ways. The instruments may be written in the key of the composition, i. e., concert key and transposed to their respective keys when extracting the parts, or; the instruments may be scored immediately in their respective keys. The latter is more correct. By this method fewer mistakes will occur in regard to playing range and transpositions. When beginning to score, the first thing to be inserted is the most important subject to be expressed.

SCORING SAXOPHONE TRIOS.

The melody is first inserted for the Saxophone to be assigned to it. This should be done in phrases of four measures, to which are simultaneously added the 2nd and 3rd Saxophones. The Piano accompaniment is then added, after which the other instruments of the Rhythmic Unit are scored in accordance with same. This should be done for the duration of the Saxophone trio. If figurations or rhythms are to be assigned to the Brass Unit, or an obligato to be written for the Violin, they should be the last to be added.

SCORING BRASS TRIOS

These are scored in the same manner as the Saxophone trio. The only difference is that the Brass Unit is scored first instead of the Saxophone Unit.

TRICK EFFECTS.

The scoring of trick effects depends upon the character of the trick. Before scoring, the trick effect should be mentally worked out and assigned to the instruments desired. When scoring, the instruments to be featured in the trick should be written in the score first, to which the balance of instruments desired are afterwards added.

SCORING ENSEMBLES.

This form of scoring applies to all concerted effects, such as Introductions, Ensemble Choruses, Organ-effects, Modulations, etc. When scoring, the instruments to be assigned to the melody, are the first to be inserted. To this the Rhythmic Unit is added, after which all the other instruments are scored in accordance with same. In some instances the harmony may be worked out for the Saxophone and Brass Unit before adding the Rhythmic Unit.

SCORING COLOR EFFECTS.

All color effects should be mentally visualized before scoring. By doing this, the actual scoring is a simple matter.

DYNAMICS.

It is very important that all the necessary dynamics are indicated under each part, so that when the parts are extracted, they will not be omitted.

In previous chapters, many examples in score form are shown. These are models, which illustrate all that has been stated above.

Chapter XXIII

AUXILIARY INSTRUMENTS

The fundamental instrumentation of the modern dance orchestra consists of three Saxophones, two Trumpets, one Trombone, Violin, Tenor Banjo, Piano, Tuba and Drums. However, other instruments are sometimes employed, but because they are usually played by a member of the fundamental orchestra, any instrument which is not included among those mentioned above, are defined as auxiliary instruments. There is one exception to this rule, which concerns the Clarinet. The Clarinet was used in jazz bands long before the Saxophone was introduced in the orchestra; but, as parts which are to be played on a Clarinet are incorporated in one of the Saxophone parts, this instrument should be considered among auxiliary instruments.

Besides the Clarinet, the most important auxiliary instruments are the following:

Oboe
Bass Clarinet
Celeste
Flute

The B♭ Clarinet

The Clarinet mostly used in the dance orchestra is a *B♭* instrument. Therefore, the part to be played on the Clarinet must be in the same notation as for the B♭ Soprano Saxophones. However, the Clarinet has a wider playing range than the Soprano, and can play as low as *D* Concert, fourth ledger line below the staff, and to be practical, as high as *F* Concert above the staff. More than one Clarinet may be employed for an instrumental effect. Clarinet solos, duets or trios, in melodic or figurative forms, are very effective, and their employment aids in producing contrasts.

Bass Clarinet

The Bass Clarinet is also a *B♭* instrument, therefore, in notation, its part is the same as the *B♭* Clarinet, though it sounds an octave lower. The playing range depends upon the ability of the player. However, the Bass Clarinet can play as low as *D* Concert, four ledger lines below the staff. Although the Bass Clarinet sounds in the bass register, its part is written in the treble clef, similar to a *B♭* Tenor Saxophone part. The Bass Clarinet is mostly used in comedy effects, but may also be used as a solo instrument.

THE FLUTE

The Flute is a *C* instrument, and therefore its part is written in the key of the composition, similar to the Violin part. More than one Flute may be employed in a similar manner as prescribed for Clarinets. The playing range of the Flute is from *C* below the staff, to double *C* above the staff. However, when scoring for one or more Flutes, the middle and upper registers are most effective.

OBOE

The Oboe is also a *C* instrument, and like the Flute, its part is written in the key of the composition. The playing range of the Oboe is from *B* below the staff, to about *B* or *C* above the staff. The Oboe, being a double-reed instrument, is not an easy instrument to master, and discretion should be used in writing difficult passages. Oboe solos, duets and trios are very effective but, for reasons already stated, intricate figurations for three Oboes should be avoided. The Oboe is very effective in Oriental effects.

CELESTE

The Celeste is played in the same manner as the Piano. The tone of the Celeste is similar to that of steel bells, struck with a soft mallet. This instrument is usually played by the Pianist or any other player in the orchestra, who is familar with Piano *technique.* The tone of the Celeste is not very strong and should not be employed unless the volume of the other instruments is subdued enough to make the tone of the Celeste heard.

Any other instrument may be employed in the dance orchestra, but parts for any auxiliary instrument should not be scored unless the exact instrumentation of the dance orchestra is known.

It will be found that most Saxophone players prefer doubling on other reed instruments, and that Trumpet and Trombone players prefer doubling on other brass instruments.

Parts for any auxiliary instrument should not be incorporated in the fundamental parts before consulting with the players. The auxiliary instruments with which the players double, must be known so thev may be incorporated in the proper fundamental parts.

CHAPTER XXIV

MODULATION

Modulation means a passing from one key to another. When well developed, modulation enhances the charm of a composition without limit. By its means all the beauties of every key are at the disposal of the composer or arranger.

Modulation is an important factor in modern dance music, and without it an arrangement will become monotonous. This need never occur. An arrangement, to be effective, must be full of contrast. As a change in tempo is contrary to all laws governing dance music, the only way to eliminate monotony is by means of modulation or change of instrumental color.

Modulations, as used in dance arrangements, are short interludes which effect a change of key. These are inserted between two strains which are written in two different keys. The modulation begins at the end and in the key of the previous strain, and then passes through a series of modulating chords which progress gradually to the key of the next strain. This should always be done unobtrusively. Therefore, the harmonic structure of the modulation must be worked out carefully, so that a pleasing and natural resolution to another key is gained without injuring the rhythm. Such interludes, or modulations, may be prolonged, and constitute a development, based on the theme of the composition. In working out such developments, the arranger is at liberty to exercise his individuality and ingenuity in free composition. However, if an interlude is not well constructed, it will not be effective, and for this reason should not be used.

Interludes which are inserted only for the purpose of modulating to another key should be concise, and progress definitely to the new key. They should never wander aimlessly or be employed unless a definite reason for modulating is obvious. They should be melodic and be sequential whenever possible. Only if done in this way, will modulations be interesting.

FORMS OF MODULATION.

The methods of constructing modulation, about to be described, are based on the following forms:

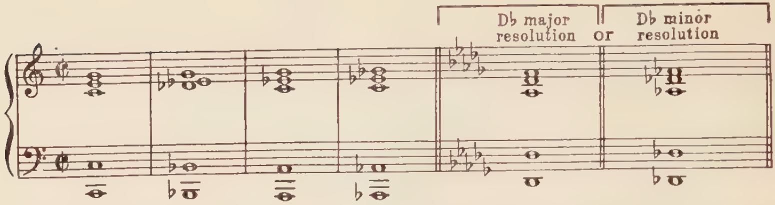
- Common Chord Modulation.
- Melodic Modulation.
- Sequential Modulation.
- Chromatic Modulation.
- False Modulation.
- Independent Modulation.
- Premature Modulation.

Each of these forms is analyzed in the following:

COMMON CHORD MODULATIONS.

A common chord modulation is an interlude, which leads from one key to another, through the medium of *diatonic chords,* or chords which form *enharmonic* changes. *Diatonic* chords are chords which are closely related to each other, and belong to the same key. *Enharmonic* changes are created by accidentals which effect the spelling, but not the sound of a chord. Modulating to a related key is simplified by *diatonic* relationship, but modulating to a distant key, in some instances, can only be achieved through *enharmonic* changes. The science of such modulation is a major subject in the study of harmony and is not fully discussed in this treatise. Instead, examples of modulations are presented in forms of four consecutive chords, and instructions are given on how to convert these forms into modulating interludes. All of these forms of modulation are written in the key of *C,* beginning with a *C major* chord in the first measure, and modulating to a *7th* chord in the fourth measure, which resolves to the key designated. These resolutions lead to either *major* or *minor* keys. However, these modulations only lead from a *major* key. If a modulation from a *minor* key is required, this can be gained by changing the first chord from *major* to *a minor,* making any necessary changes in the following chords that might improve the progression. However, a modulation from a *minor* key is very rarely met with in modern dance music, and, therefore, does not require a full analysis. In such instances, the ingenuity of the arranger will be sufficient to meet the situation. Although, the forms of modulations, shown in the following examples, modulate from the key of *C,* they may be used for the purpose of modulating from other keys. This is achieved through the medium of transposition. The forms to be shown are four chord modulations, to which a melody must be added.

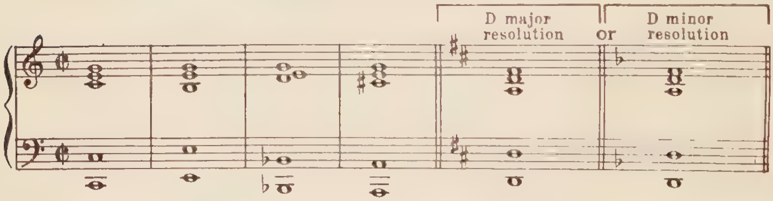
MODULATION No. 1



Modulation No. 1, leads from the key of *C major* to the key of *D♭ major* or *D♭ minor*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to D major or D minor.
D major to E♭ major or E♭ minor.
E♭ major to E major or E minor.
E major to F major or F minor.
F major to G♭ major or F♯ minor.
G♭ major to G major or G minor.
G major to A♭ major or A♭ minor.
A♭ major to A major or A minor.
A major to B♭ major or B♭ minor.
B♭ major to B major or B minor.
B major to C major or C minor..

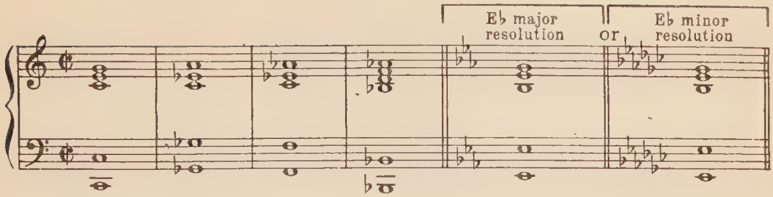
MODULATION No. 2



Modulation No. 2, leads from the key of *C* to the key of *D*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to E♭ major or E♭ minor.
D major to E major or E minor.
E♭ major to F major or F minor.
E major to G♭ major or F♯ minor.
F major to G major or G minor.
G♭ major to A♭ major or A♭ minor.
G major to A major or A minor.
A♭ major to B♭ major or B♭ minor.
A major to B major or B minor.
B♭ major to C major or C minor.
B major to D♭ major or D♭ minor.

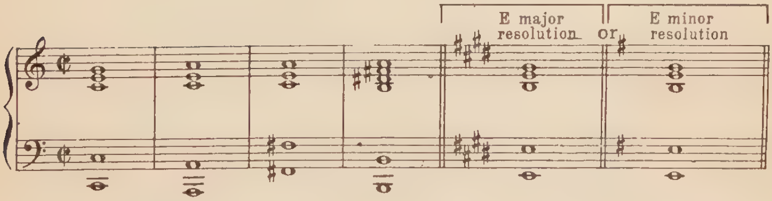
MODULATION No. 3



Modulation No. 3, leads from the key of *C* to the key of *E♭*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to E major or E minor.
D major to F major or F minor.
E♭ major to G♭ major or F♯ minor.
E major to G major or G minor.
F major to A♭ major or A♭ minor.
G♭ major to A major or A minor.
G major to B♭ major or B♭ minor.
A♭ major to B major or B minor.
A major to C major or C minor.
B♭ major to D♭ major or D♭ minor.
B major to D major or D minor.

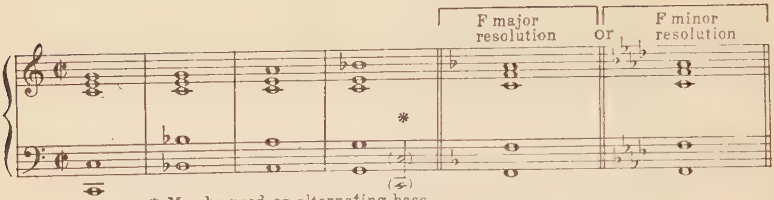
MODULATION No. 4



Modulation No. 4, leads from the key of *C* to the key of *E*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to F major or F minor.
D major to G♭ major or F♯ minor.
E♭ major to G major or G minor.
E major to A♭ major or A♭ minor.
F major to A major or A minor.
G♭ major to B♭ major or B♭ minor.
G major to B major or B minor.
A♭ major to C major or C minor.
A major to D♭ major or D♭ minor.
B♭ major to D major or D minor.
B major to E♭ major or E♭ minor.

MODULATION No. 5

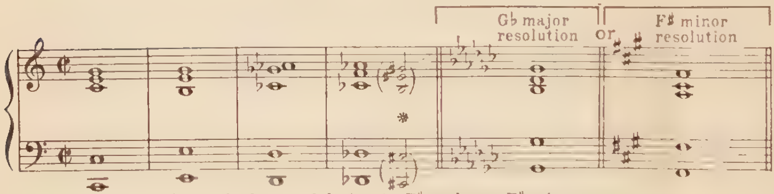


✱ May be used as alternating bass

Modulation No. 5, leads from the key of *C,* to the key of *F.* When transposed, it also constitutes a modulation between the following keys:

D♭ major to G♭ major or F♯ minor.
D major to G major or G minor.
E♭ major to A♭ major or A♭ minor.
E major to A major or A minor.
F major to B♭ major or B♭ minor.
G♭ major to B major or B minor.
G major to C major or C minor.
A♭ major to D♭ major or D♭ minor.
A major to D major or D minor.
B♭ major to E♭ major or E♭ minor.
B major to E major or E minor.

MODULATION No. 6

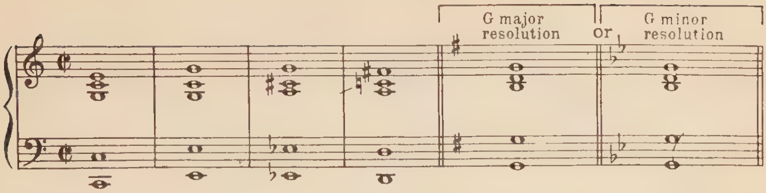


✱ To be used when modulating to F♯ major or F♯ minor

Modulation No. 6, leads from the key of *C* to the key of *G♭.* When transposed, it also constitutes a modulation between the following keys:

D♭ major to G major or G minor.
D major to A♭ major or A♭ minor.
E♭ major to A major or A minor.
E major to B♭ major or B♭ minor.
F major to B major or B minor.
G♭ major to C major or C minor.
G major to D♭ major or D♭ minor.
A♭ major to D major or D minor.
A major to E♭ major or E♭ minor.
B♭ major to E major or E minor.
B major to F major or F minor.

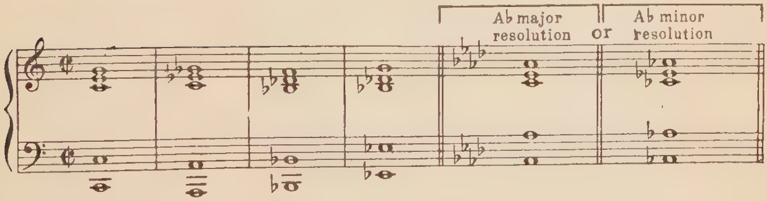
MODULATION No. 7



Modulation No. 7, leads from the key of *C* to the key of *G*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to A♭ major or A♭ minor.
D major to A major or A minor.
E♭ major to B♭ major or B♭ minor.
E major to B major or B minor.
F major to C major or C minor.
G♭ major to D♭ major or D♭ minor.
G major to D major or D minor.
A♭ major to E♭ major or E♭ minor.
A Major to E major or E minor.
B♭ major to F major or F minor.
B major to G♭ major or F♯ minor.

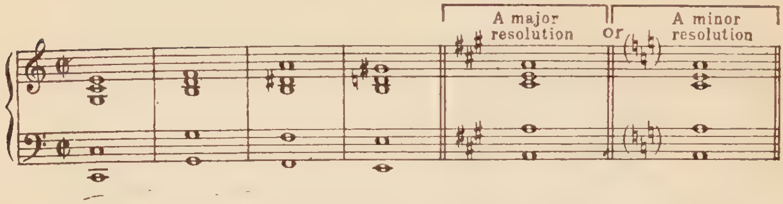
MODULATION No. 8



Modulation No. 8, leads from the key of *C* to the key *of A♭*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to A major or A minor.
D major to B♭ major or B♭ minor.
E♭ major to B major or B minor.
E major to C major or C minor.
F major to D♭ major or D♭ minor.
G♭ major to D major or D minor.
G major to E♭ major or E♭ minor.
A♭ major to E major or E minor.
A major to F major or F minor.
B♭ major to G♭ major or F♯ minor.
B major to G major or G minor.

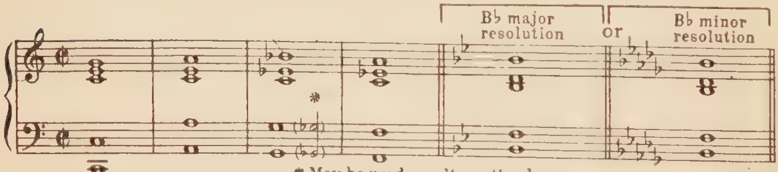
MODULATION No. 9



Modulation No. 9 leads from the key of *C* to the key of *A*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to B♭ major or B♭ minor.
D major to B major or B minor.
E♭ major to C major or C minor.
E major to D♭ major or D♭ minor.
F major to D major or D minor.
G♭ major to E♭ major or E♭ minor.
G major to E major or E minor.
A♭ major to F major or F minor.
A major to G♭ major or F♯ minor.
B♭ major to G major or G minor.
B major to A♭ major or A♭ minor.

MODULATION No. 10

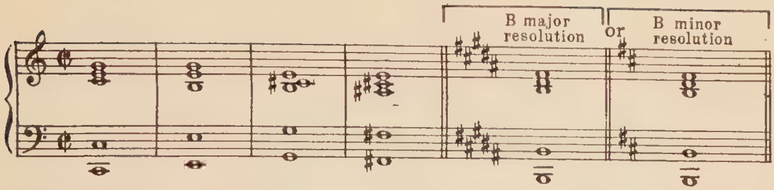


*May be used as alternating bass

Modulation No. 10, leads from the key of *C* to the key of *B♭*. When transposed, it also constitutes a modulation between the following keys:

D♭ major to B major or B minor.
D major to C major or C minor.
E♭ major to D♭ major or D♭ minor.
E major to D major or D minor.
F major to E♭ major or E♭ minor.
G♭ major to E major or E minor.
G major to F major or F minor.
A♭ major to G♭ major or G♭ minor.
A major to G major or G minor.
B♭ major to A♭ major or A♭ minor.
B major to A major or A minor.

MODULATION No. 11



Modulation No. 11, leads from the key of *C* to the key of *B*. When transposed, it also constitutes a modulation between the following keys:

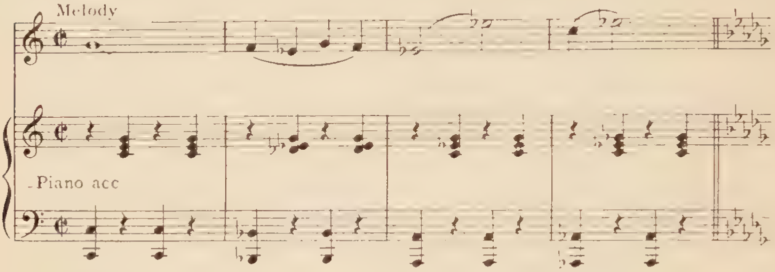
D♭ major to C major or C minor.
D major to D♭ major or D♭ minor.
E♭ major to D major or D minor.
E major to E♭ major or E♭ minor.
F major to E major or E minor.
G♭ major to F major or F minor.
G major to G♭ major or F♯ minor.
A♭ major to G major or G minor.
A major to A♭ major or A♭ minor.
B♭ major to A major or A♭ minor.
B major to B♭ major or B♭ minor.

In the above forms of modulations, the key of *F*♯ major has not been quoted. This key, which is in six *sharps,* sounds the same as the key of *G*♭, which is in six *flats*. For the reason that flat keys are more practical for the dance orchestra, the key of *G*♭ is preferred to the key of *F*♯. However, the key of *F*♯ *minor,* is in three *sharps,* whereas the key of *G*♭ *minor* theoretically requires nine flats. Therefore, the key of *F*♯ *minor,* is more practical and preferred. Later on, the above shown forms of modulations will be referred to frequently.

Melodic Modulations.

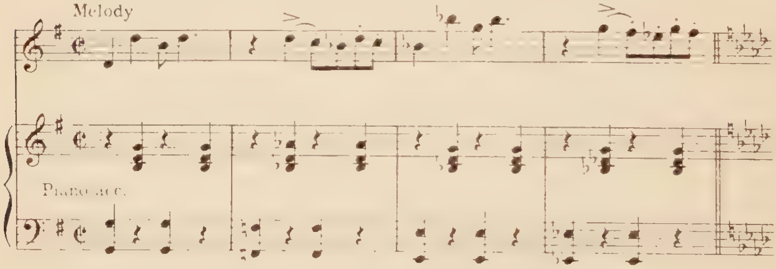
As already stated, modulating interludes should be made interesting. This will not result if the above shown forms of modulation were used in the form presented. For this reason a melody should be added. This melody should be based on the theme of some outstanding melodic progression of the composition being arranged. When adding a melody, the notes comprising it must fit the harmonic structure of the modulating form to be employed. However, this sometimes cannot be accomplished if a theme is to be added in its original form. When this is apparent, the theme may be paraphrased, so as to suit the harmonic structure, at the same time retaining the original character of the theme. After a melody has been added, the harmonic structure of the modulation should be converted to rhythm. This is illustrated in an example to be shown later. In giving further instructions on this subject, the theme of the well-known folk song, "Swanee River" is used. The following example shows this melody added to the harmonic structure of modulation No. 1, and also the manner in which this harmonic structure is converted into rhythm.

Example 1



The following example is a melodic modulation based on modulation No. 1, but transposed a fifth higher. This illustrates how transposition adds to the value of all forms of modulations shown heretofore.

Ex 2



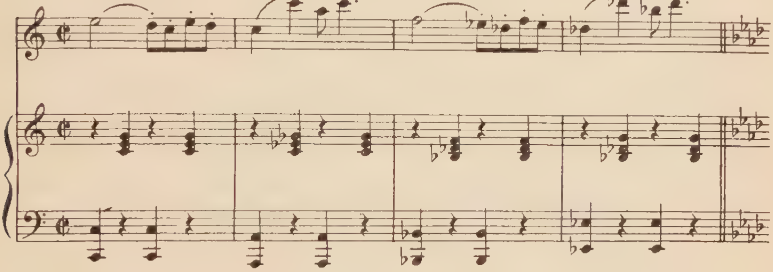
Note, in the above example that the theme, "Swanee River" is paraphrased to fit the harmonic structure. The possibilities of melodic modulation are unlimited. "Swanee River" or any other melody may be paraphrased to fit any harmonic structure, provided the arranger has the requisite knowledge and ingenuity. Also note in the above example, that the inversions for the right hand of the Piano are different from those shown in Ex. 1. When transposing a piano accompaniment to a key an interval of a *fourth* or *fifth* above or below the original key, it is necessary to invert the *intervals* of the right hand Piano chords, so that they are placed in the middle register of the Piano. In order to be proficient in constructing modulations similar to those shown above, experiments in which all forms of modulations are employed, should be made.

Sequential Modulations.

Sequence as applied to music, means a regular or alternate succession of similar chords or melodic phrases. Sequential modulations are constructed in accordance with the above mentioned rule. This type of modulation is far more interesting than those quoted heretofore. Sequential modulations may also be melodic and these give the arranger more freedom of invention. In constructing a Sequential modulation, all the forms of modulation quoted heretofore may be employed. For instance:

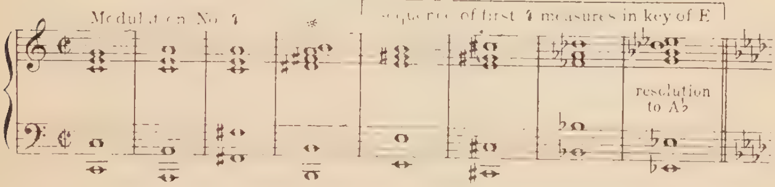
If a modulation from the key of *C* to the key of *A*♭ is to be effected, modulation No. 8, will serve the purpose as shown in the following example:

Ex. 3



However, if a Sequential modulation is to be constructed between these two keys, the form of modulation to be employed must lead to a key which in turn leads to the key of *A*♭, when that same form of modulation is repeated in an intermediate transposed key. For example:

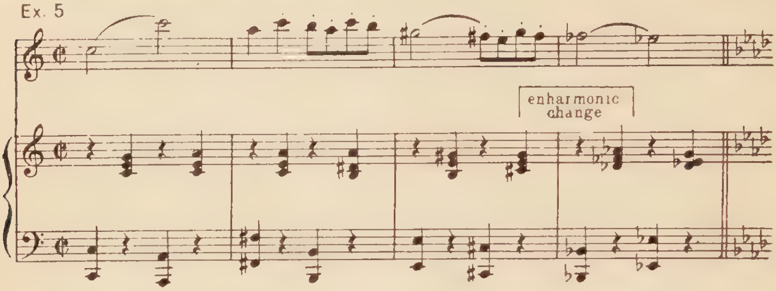
Ex 4



The Sequential modulation shown above, employs modulation No. 4 in the first four measures. These lead from the key of *C* to the key of *E*. The last four measures are a transposition of the first four measures, beginning in the key of *E*, and leading to the key *A*♭. A careful study of the above example will illustrate this clearly. Note, however, that the chord indicated by a (*) is an inverted form of the same chord, shown in the original version of modulation No. 4. This inversion is necessary so that pleasing resolution to the *E* major chord is gained. Also note, that a change in key signature is not inserted after the fourth measure. Instead, the key of the last four measures is established by *accidentals*. When using such Sequential modulations for interluding purposes, they may remain eight measures long. However, when a shorter interlude is desired, the same harmonic structure can be condensed to four measures.

This is done by giving each change of harmony the time value of a *half* measure instead of a *full* measure. This is illustrated in the following example, which is based on the Sequential modulation, shown in Ex. 4.

Ex. 5

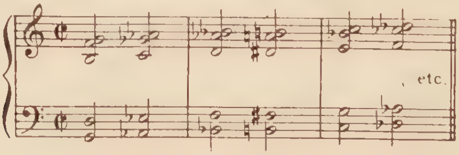


As stated above, experimenting will make the arranger proficient, and will acquaint him with all possible combinations in sequential form. This should be done before proceeding with the next subject.

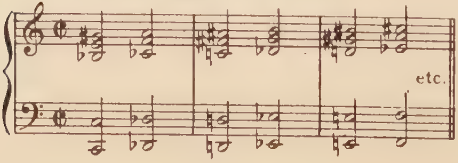
CHROMATIC MODULATIONS.

Chromatic modulations are those in which the intervals of the harmonic structure move primarily in a *chromatic* fashion. To be most effective, such modulations are based on *seventh, diminished, augmented* and *ninth* chords. Such modulations are also more or less neutral in relation to keys. Before giving instructions in the construction of Chromatic modulations, it is necessary to show by example the different chords concerned.

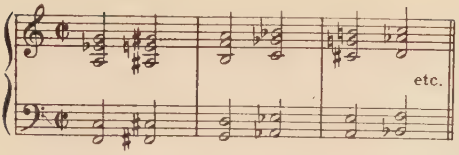
Ex. 6 Chromatic Seventh Chords



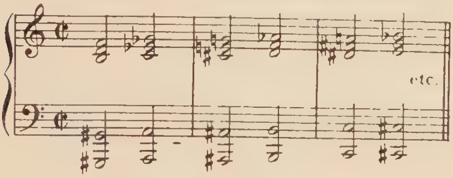
Ex. 7 Chromatic Seventh, with Augmented Fifth Chords



Ex. 8 Chromatic Ninth Chords

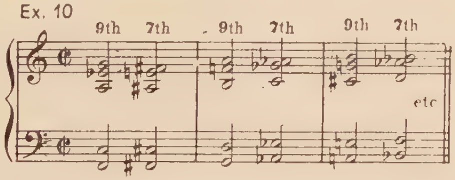


Ex. 9 Chromatic Diminished Seventh Chords



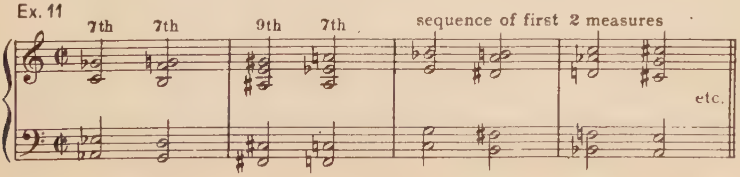
Example 6, shows an upward chromatic progression of consecutive *seventh* chords. These may also progress downward, and in both forms may be used for modulating purposes. However, the effect of consecutive *seventh* chords is rather eccentric, because of the consecutive *fifths,* which are written in the lower staff. These are modified by alternation with other chords. For example:

Ex. 10



The above example shows a Chromatic modulation, which employs *ninth* and *seventh* chords. The consecutive *fifths* written in the lower staff are modified by the contrary motion† of the melody notes written in the upper staff. Note, that the second and third measures are in sequence with the first measure. This illustrates another form of Sequential modulation. The following example illustrates still another method of alternating *seventh* and *ninth* chords.

Ex. 11



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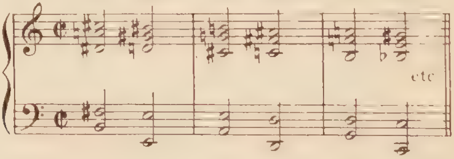
† In the study of four part harmony, contrary motion means the moving of voices in opposite direction, i. e., one or more voices move downward, while one or both voices move upward.

It has been stated that chromatic consecutive *seventh* chords create a *bizzare* effect, and this may be modified by employing other chords in conjunction with *seventh* chords. In the above example, the sequence of three consecutive *seventh* chords is interrupted by a *ninth* chord. This *ninth* chord is only the result of circumstances. Notice that the melody note of the modulation leads upward, chromatically. All the other intervals of the harmonic structure lead chromatically, downward. This causes a *ninth* chord to appear when the melody note of the chord constitutes the *ninth* of that respective chord. The consecutive *fifths* written in the lower staff are modified by the contrary motion of the melody. The last two measures of this example are a sequence of the first two measures. These last two measures are transposed until a point is reached where a chromatic progression of the melody is continued.

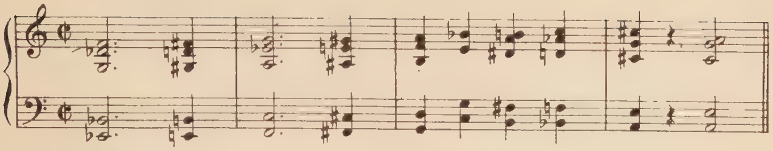
Example 7, shows a chromatic upward progression of consecutive *seventh* chords with *augmented fifths.* This is far more effective in chromatic progression than original seventh chords, and for this reason may be employed in that form for modulating purposes. Such chords can also be incorporated into modulations in which *ninth* chords are present. The following example shows a sequence of *ninth* and *seventh* chords with *augmented fifths* in downward chromatic progression.

Ex. 12



Chromatic modulations are very interesting to work out. When well developed and judiciously used, they are far more effective than common chord modulations. However, they should not be employed too often, because too much repetition of the same effect, will wear out the novelty. If employed occasionally, or once in an arrangement, a chromatic modulation will have a psychological effect and, therefore, be more noticeable. The chromatic modulation quoted above, may in some instances be employed in modulating interludes without adding the theme of the composition. When this effect is desired, it is important that the upper note of the harmonic structure be more or less melodic, and lead to the first melody note of the next strain. When doing this, the rhythm of the harmonic structure may take any form, which tends to make such modulations more interesting.

Ex. 13



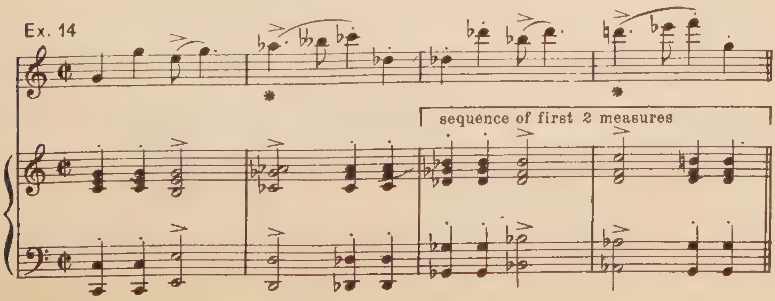
Whenever possible, the theme of the composition should be added to the harmonic structure, in either its original or in paraphrased form. Chromatic modulations, as a whole, are not related to any particular key. As the average melody ends with the key note, it is difficult to begin a modulation in chromatic form without a perceptive and definite break. For this reason, modulations should begin in the key of the previous strain, with a chord that is closely related to that key. After this, a Chromatic modulation may constitute the harmonic structure for the remaining measures of the interlude. A Chromatic modulation may also constitute the completion of an interlude. By this is meant that a modulation in common chords, which has not fulfilled its purpose, may be completed by adding a chromatic modulation which leads to the key desired.

False Modulations.

False modulations are interludes which modulate and return to the original key. Such interludes may be used frequently, and are especially valuable when the monotonous effect of one key is to be eliminated. In some instances, the transposition of the melody to another key and an extreme contrast in instrumental color, for natural reasons, is not obtainable. In some instances, a False modulation, when inserted at the psychological place, will deceive the listener to such an extent that a refreshing effect is created when resuming the original key.

False modulations are constructed by a sequence of one form of modulation, or by combining two different forms of modulations in consecutive order, which through the medium of transposition, return to the key in which the modulation started. For example:

Ex. 14

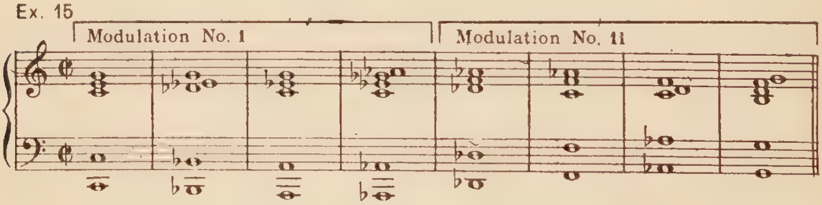


The above modulation is based on modulation No. 6, which is shown in the first two measures in a rhythm different from that of the original form. The first two measures, from the key of *C*, modulate and resolve to the key of *G*♭. The last two measures, which form a transposed sequence of the first two measures, begin in the key of *G*♭, modulate and resolve back to the key of *C*. To this harmonic structure, the "Swanee River" theme is added. The measures designated by a (*) are part of the original theme, which heretofore has not been used. Note the rhythmic liberties exercised in the above shown modulation. Such rhythmic liberties are very effective.

When False modulations are constructed by employing two different forms of modulation in consecutive order, it is necessary to select those forms of modulation which, when combined, return to the first key. When doing this, it is always necessary to transpose the form of modulation which has been added to the first form. For instance:

By combining modulations No. 1 and No. 11, a return to the original key can only be effected in the following way. Modulation No. 1 is a modulation which leads to a key one half tone higher. Modulation No. 11, modulates to a key one half tone lower. When combining these two to constitute a False modulation in the key of *C*, modulation No. 1 must remain as written. It begins in the key of *C*, modulates and resolves to the key of *D*♭. Modulation No. 11 is then transposed one half tone higher to *D*♭, which modulates and resolves back to the key of *C*. This is clearly illustrated in the following example:

Ex. 15



The following are a few other possible combinations that may be used to form False modulations:

Modulation No. 2, in the key of *C*, followed by modulation No. 10, transposed to the key of *D*.

Modulation No. 4, in the key of *C*, followed by modulation No. 8, transposed to the key of *E*.

Modulation No. 5, in the key of *C*, followed by modulation No. 7, transposed to the key of *F*.

The above forms of modulations only constitute False modulation in the key of *C*. However, when an already constructed False modulation is transposed, it will act as a False modulation in all other keys.

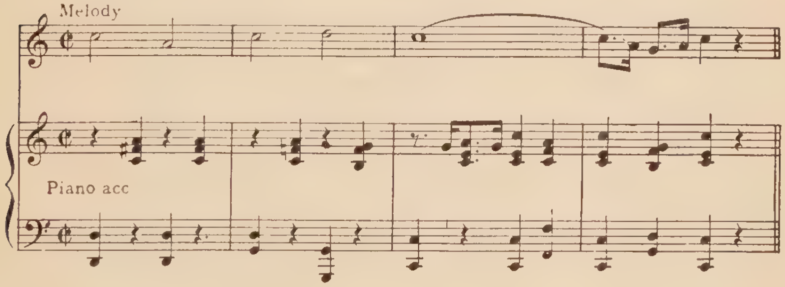
INDEPENDENT MODULATIONS.

Independent modulations are modulating interludes, which begin only after the previous strain has come to a definite close. This manner of inserting modulating interludes is rarely exercised, unless the last measure of the previous strain can be sufficiently altered, so as to lead to the modulating interlude without a break. They are not effective and should, therefore, not be often employed.

PREMATURE MODULATIONS.

Premature modulations are modulating interludes which begin before a definite close of the previous strain is effected. This manner of inserting modulating interludes is far more effective and practical than Independent modulation. When inserting a Premature modulation, it is necessary to discard the last one or two measures of the previous strain, and at that point begin with the modulating interlude. For example:

Ex. 16



The above example represents the concluding measures of a strain. When adding a Premature modulation, the last two measures are replaced by the first measure of the modulation, as shown in Ex. 17.

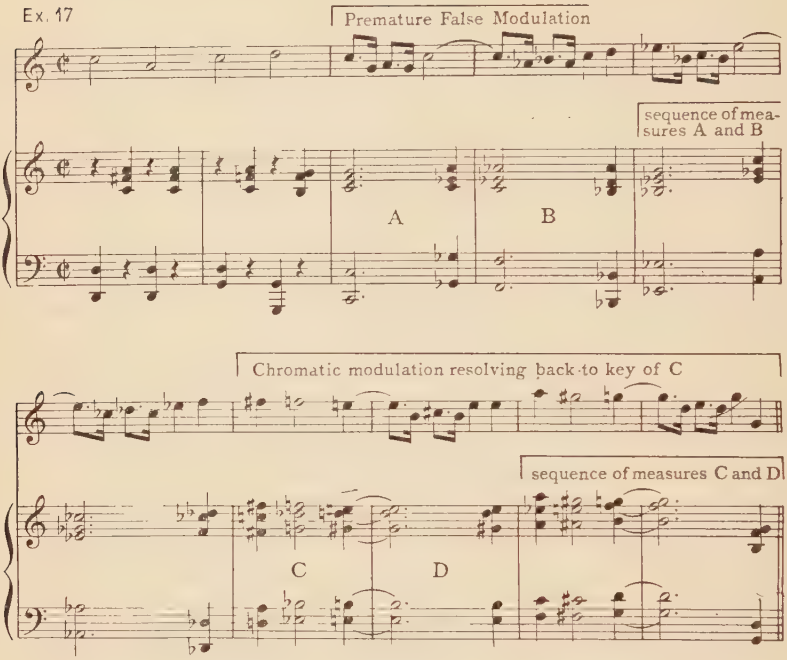
The forms of modulations shown and the different ways in which they are to be used, are a basis on which to work. The aggregate of results that can be obtained is too numerous to illustrate. If the arranger will take advantage of all the modulating material herein given, and combinations possible, he will be supplied with a wealth of modulations.

The information given in this chapter should stimulate the individuality of the inexperienced arranger. If he will at first adhere to the above given forms of modulation and rules relating to them, he will in a short time be able to create modulations, different in character and harmonization from those given in this chapter.

INSTRUMENTATION OF MODULATIONS.

Modulations of all types may be scored for the dance orchestra in the form of ensemble, Saxophone trio, Brass trio, individual solo, or any other forms of instrumentation. However, it is necessary that a

Ex. 17


Premature False Modulation
sequence of measures A and B
A
B
Chromatic modulation resolving back to key of C
sequence of measures C and D
C
D

modulating interlude should, to some extent, be different in instrumental tone-color or volume from that of the previous strain. A modulation which follows a Saxophone trio, may begin with a sudden attack of ensemble. It may also begin with a *crescendo,* by adding the Brass Unit and then gradually increasing in volume until a climax has been reached. This manner of scoring modulations is very effective, especially when they are inserted between two strains which are more or less similar in character and instrumentation. The manner in which a modulation is to be scored is primarily a matter of taste and good judgment.

No rules may be given which can completely govern this branch of the art of modulation. Let it suffice to say that well developed and well orchestrated modulations reflect the ability and individuality of the arranger, as nothing else does.

FORMS AND ROUTINE

With the closing of the last chapter, the most important instrumental effects and their scoring have been described. It still remains to explain how an entire arrangement is to be constructed.

Constructing an arrangement consists of combining composition and instrumental effect, plus routine. Before a routine can be set for an arrangement, it is necessary to first analyze the type of composition to be arranged. Every composition requires individual treatment as to routine and instrumental effect, that which may be effective for one composition may not be effective for another. Some compositions consist of two, three or more strains, and in rare instances consist of only one strain. Naturally, each instance must be treated differently, as to routine.

The type of compositions the dance arranger is mostly confronted with for arranging, are the so-called "popular songs." These are usually in fox-trot or waltz tempo, and need no rhythmic alteration. However, very often a popular song, which is originally in waltz tempo, may be converted into a fox-trot. This task is not a difficult one and requires no further explanation.

The average popular song consists of two strains, viz., "verse" and "chorus." Sometimes a third strain is added, commonly known as "patter," which if musically interesting, may be incorporated in a dance arrangement. Verses vary in length, and are from sixteen to thirty-two measures long, whereas, the average chorus is thirty-two measures long. In some instances, a chorus is only sixteen measures, and in rare intances, forty measures long.

Dance arrangements of popular songs should be from three to four minutes long, which in music amounts to about one hundred and sixty measures. Obviously, when two strains, consisting of forty-eight measures are to be routined, it will become necessary to repeat one or both strains several times, so that the required length is obtained. In view of the fact that the chorus of a popular song is usually the most important strain, this strain is the one to be repeated. In some instances, where the combined verse and chorus only amounts to thirty-two or forty measures, the verse may also be repeated.

Setting Routines

An arrangement may begin with the verse, or it may begin with a chorus. The following are forms of routines, irrespective of instrumental effect:

Introduction	Introduction	Introduction
Verse	1st Chorus	1st Chorus
1st Chorus	Verse	2nd Chorus
2nd Chorus	2nd Chorus	Verse
3rd Chorus	3rd Chorus	3rd Chorus
Final Chorus	Final Chorus	Final Chorus

As already stated, a third strain, different from the verse and chorus, known as "patter," may in some instances be included in an arrangement. This patter may take the place of the Third Chorus, when the preceding strain is also a Chorus, or be added and placed between a Third and Final Chorus. In the above shown routines, modulating interludes have not been quoted. The incorporating of such interludes depend upon the instrumental effects to be scored, and are, therefore, only inserted for the purpose of changing keys or for the purpose of producing a refreshing effect. Modulating interludes are very seldon required between a verse and chorus. If they are used, the natural flow of melodic progression between the verse and chorus is interrupted, not only by the interlude, but also by the change of key. However, it may be done, but at the risk of an unpleasing musical effect. It is impossible to mention every conceivable combination of routine, as the selection of instrumental effects also influences the construction of a routine.

Instrumental Effects Applied to Routines

An entire composition can be scored for a given instrumental effect, but if the same effect is used continually throughout, it will be exceedingly monotonous and uninteresting. As already stated, contrasting effects of some kind or other should always be used. For this reaon, a change of instrumental effect should occur, preferably, at the beginning of each strain. When forming a routine of instrumental effects, their consecutive order must be considered. It must be remembered that the listener is more interested in the melody of the composition than the arrangement. In view of this fact, the melody of the composition must be well planted at the beginning of an arrangement before beginning with trick effects, or other instrumental effects which have a tendency to obscure the melody.

Before the routine for an arrangement can be definitely set, the possibilities of instrumental effects must first be summed up and appropriate selections made. The first strain to consider is the chorus, which may be scored in three or four different ways. When doing this, any key which is practical and appropriate to the instrumental effect may be selected.

The combinations of instrumental effects and possible routines are so numerous that only a few can be mentioned here. Those shown may be used or may act as a guide when making first attempts.

Routine No. I.

Introduction—Original key—Based on theme of the chorus.

Verse—Original key—Ensemble, employing Fundamental Saxophone Unit.

First Chorus—Original key—Fundamental Saxophone Theme trio, assisted by Brass.

Second Chorus—Original key— Brass trio, assisted or unassisted by Saxophones.

Modulation—To higher key — Brass trio continued, while Saxophone players change instruments.

Third Chorus—In high key—Soprano Saxophones Theme trio, unassisted by Brass.

Modulation—Back to original key—Any instrumental effect which does not require Saxophones.

Fourth Final Chorus—Original key—Full ensemble, employing fundamental Saxophone Unit.

Routine No. II.

Introduction—Original key—Based on theme of verse or on an original composition.

First Chorus—Original key—Ensemble, employing fundamental Saxophone Unit.

False Modulation—Original key—Contrasting instrumental effects.

Verse—Original key—Ensemble, different in phrasing and tone-color from that of first chorus.

Second Chorus—Original key—Trick effect for Brass and Fundamental Saxophone Unit.

Modulation—To higher key—Any instrumental effect which does not require the aid of the Saxophone Unit.

Third Chorus—In high key—Soprano Saxophone Theme Trio, occasionally assisted by the Brass Unit.

Modulation—To original key or one tone higher than original key—An original composition scored in same instrumentation as third chorus.

Fourth or Final Chorus—One tone higher than original key—Rhythmic ensemble, employing three Soprano Saxophones.

Note, that in the Routine No. I, the Saxophone players are given ample time for changing of instruments during modulations. This is an important item and refers also to applying and removing mutes. It is necessary to be practical in every respect when constructing routines. Physical endurance must be considered. It is unwise to employ Brass instruments without relief. This also applies to Saxophones; but, owing to the fact that the tone-color of the Saxophone is so vitally important in the dance orchestra, much relief cannot be given to the players. An occasional Violin solo will give both Saxophone and Brass players a breathing spell. This advice should be taken advantage of, so that the full co-operation of the players can be demanded without imposing upon them.

The Introduction

Introductions, as applied to dance arrangements, are opening interludes. They lead to the first strain of the composition. There are two important things to remember when constructing introductions. Firstly, they should be rhythmic and create the sense of rhythm that is required throughout the entire arrangement. Secondly, they should be melodically different from the strain to follow. For this reason, if the first strain of an arrangement is to be the verse, then the introduction should melodically be based on the theme of the chorus, and if the first strain is to be the chorus, then the introduction may either be melodically based on the theme of the verse or any other strain of the composition. It may also be an invention in free composition and be different in a melodic sense than any other strain of the composition.

Like modulations, introductions should never be meaningless, or wander about aimlessly. They should be definite, and if length is required to fully express an original thought, they may be long.

The Verse

The verse may be scored in any form of instrumental effect, preferably in ensemble form. However, the manner in which the verse is to be scored, depends upon its position in the routine.

The First Chorus

The first chorus of an arrangement should always introduce the melody definitely. When the first chorus is the first strain after the introduction, it may be scored in ensemble form. Such ensembles as illustrated in Exs. 1, 2, 3, 4 and 5, Chapter XXI, are suitable. A first chorus may also be scored as a Theme trio for Saxophones. Such may be for the Fundamental Saxophones or Soprano Saxophones. A solo for any Saxophone may be employed, and such will be particularly effective, if accompanied by a concerted ensemble of subdued rhythm, similar to that shown in Ex. 9, Chapter XXI.

When the first chorus is the second strain, and follows the verse, the instrumental effect should be different from that of the verse. If the verse is scored in ensemble form, the first chorus may be scored as a Theme trio for Saxophones. Such is customarily assigned to the fundamental Saxophones, but this should not be accepted as an unbreakable rule. Other instrumental effects may be used, but it is important that the melody is definitely introduced, and that the instrumental effect is different from that of the verse. If the verse is scored as a Saxophone solo, duet or trio, then the first chorus may be in ensemble form.

Under no circumstances, should a first chorus be a trick effect. Trick effects or any other unusual characteristic effects should be saved for a later chorus.

THE SECOND CHORUS

The manner in which a second chorus is to be scored, depends upon its position. Whether the first chorus follows the verse, or the verse follows the first chorus, the instrumental effect of the second chorus should be different from those of the two preceding strains. If desired, a trick effect may be scored. Brass solos, duets or trios are also appropriate. However, this depends on the character of the composition, and also what instrumental effect is to be employed in the third chorus.

When the second chorus is to be the second strain, and like the first chorus, also precedes the verse, the second chorus should again be different in instrumental effect from that of the first chorus. If the first chorus is in ensemble form, then the second chorus may be scored as a Saxophone trio, similar to those illustrated in Exs. 23 and 24, Chapter XVII. Chapter XIX, also shows appropriate Saxophone trios, assisted by the Brass Unit. If the first chorus is scored in ensemble form and the second chorus is to be scored in any of the above mentioned forms, then the verse may again be scored in a different ensemble form from that of the first chorus. Placing two choruses ahead of the verse will often lead into complications, as to the manner in which the third chorus is then to be scored. For this reason, this form of routine should not be preferred.

THE THIRD CHORUS

Assuming that the third chorus follows the second chorus, the instrumental effect of the third chorus may take any unusal form. The third chorus may be properly termed "arranger's chorus," because, in this chorus, the arranger may take any liberty, and let his imagination take vent. Characteristic effects similar to those illustrated in Exs. 10, 11, 12, 13, 14 and 15, Chapter XXI, are appropriate.

At the end of the second chorus (third strain), is the psychological moment for a change of key. Therefore, a modulating interlude, leading to another key may precede the third chorus, and the third chorus be scored for soprano Saxophones, or similar.

THE DEVELOPMENT

Interludes, which are original in composition, or are a "development" of the combined themes of verse and chorus, may either replace the third chorus, or be inserted between the third and fourth chorus. Such development interludes may, if desired, also effect a change of key.

THE FOURTH OR FINAL CHORUS

The fourth or final chorus of an arrangement should be scored in ensemble form. In Chapter XXI, Exs. 1, 2, 3, 4 and 5, show suitable Concerted forms; Exs. 6, 7 and 8, show suitable Rhythmic forms. If the third chorus was transposed to another key, then another modulating interlude, different from the one previous, must again be inserted, so that a return to the original key is effected. However, it is not always advisable to return to the original key. If brilliancy is required in the last chorus, and the range of the melody allows it, the modulating interlude may lead to a key, one tone higher than the original key, and the last chorus scored in such key.

If the composition lacks natural dance rhythm, and a rhythmic impression must be made in the final chorus, it can be done by employing occasional breaks or cymbal crashes.

THE CODA

A Coda is a final interlude which appears at the end of an arrangement. An arrangement may end without a coda, but by adding such, the finish of an arrangement becomes more interesting. A coda my end *fortissimo* or *pianissimo;* which, is a matter of choice. However, they should not be too long.

PARAPHRASING CLASSICS

The art of transcribing classical works for the modern dance orchestra requires more thought and *technique* in scoring than popular music. Therefore, the arranger must first be proficient in scoring popular dance arrangements before attempting to score classical fox-trot paraphrases.

Such works, if well constructed and well scored, may be considered works of art, but if distorted and poorly scored, they will invite unpleasant criticism. The original thought of the composer should always be respected and kept in mind when constructing and scoring.

When selecting material for classical paraphrases, the composition selected should, firstly, lend itself easily to the fox-trot tempo. Secondly, it should be one with which the public is familiar.

After an appropriate selection has been made, the composition should be thoroughly analyzed. If the work is originally intended for the symphony orchestra, the arranger should secure the orchestral score and study the composer's instrumental colorings. If possible, the arranger should hear the work played by a symphony orchestra. In fact, he should be thoroughly familiar with every detail of the original work. With such knowledge as a guide when scoring, a fox-trot paraphrase will retain all the beauties and character of the original composition.

When transcribing the instrumental colors of the symphony orchestra to those of the modern dance orchestra, it must be remembered that although the dance orchestra is much smaller than the symphony orchestra, the volume of the latter can be imitated to some extent. When listening to a symphony orchestra of eighty players, the volume created equals the amount of volume to be expected from eighty players, but, the volume created in a dance orchestra, consisting of twelve players, can equal the volume of a thirty-piece symphony orchestra. This is caused by the presence of Saxophones in the dance orchestra. The musical value of these instruments is not yet fully appreciated. The fact that the different Saxophones possess different tone-colors, and, by the employment of the various color changing devices, the Trumpet and Trombone also produce several tone-colors, makes it possible for the arranger to imitate most of the instrumental effects of the symphony orchestra, when scoring for the dance orchestra. For instance, the Alto or Tenor Saxophones, the Trumpet or Trombone (open in hat) can imitate a French Horn. The Saxophones can successfully substitute for Clarinets, Violins and Cello. Especially the Baritone Saxophone or Trombone (thru megaphone) can produce excellent imitations of the Cello. The Soprano Saxophone or muted Trumpet (kazoo or wa-wa mute) can imitate and substitute for Oboe. The Tenor Saxophone, in the low register, is very similar in tone-color to that of the Bassoon. The Violin can substitute for Flute. Many Saxophone players double on Oboe, Clarinet, Flute, Bassoon, Bass-Clarinet, etc., and brass players double on French Horn. If so, these are assets which the arranger should take advantage of.

A fox-trot paraphrase may be longer than a popular dance arrangement. However, they should not be too long. Two hundred measures should be the average length, but if the subject cannot be fully expressed in that amount, two hundred and fifty measures are permissible. To obtain a certain required length, the original classical composition must sometimes be lengthened or shortened. This needs good judgment. If too short, it may be repeated, and for such repetition, scored in a manner different from that of the first time. It may also be wedded to another composition of the same type, by the same composer. Shortening a classical composition can only be done by retaining the most important themes and eliminating those themes and interludes which are of least importance.

Compositions, for symphony orchestra, are written in sharp keys more often than flat keys. Therefore, when scoring such works for the dance orchestra, they may be transposed to a nearby key which is more suitable for Saxophones and brass instruments.

Rhythmically, classical fox-trot paraphrases should not be more tricky than popular dance arrangements. For dancing purposes, a strict dance rhythm must always be maintained. For concert purposes, however, rhythmic liberties may be taken. As a whole, the rhythm, instrumental color and general effect must remain within the limitations of dance music, and at the same time be in keeping with the character and mood of the original composition.

Resumé

With the closing of this chapter, all of the salient points of arranging for the modern dance orchestra have been described. The actual act of scoring and constructing a dance arrangement still remains to be accomplished, but, if every instrumental effect, forms of routine, modulation, and other advices given in this book are taken count of and remembered, the beginner should be sufficiently prepared to make his first dance arrangement.

When making first attempts, the beginner should not take on a too difficult task. He should begin by making arrangements in the simplest forms of routine and instrumental effects. It must be remembered that the making of each arrangement, although in simple forms, is self-instructive, and will further clarify what has been expounded in this book. If the beginner is diligent and persistent in his endeavor, he will find that practice and experience will make him competent to cope with those problems in arranging, which at first were difficult.

PRACTICE

As already stated, practice is necessary for the beginner, and for the benefit of those who have never attempted scoring, a few instructions on how to practice will be given.

The examples shown in this book are excerpts from scores of dance arrangements, which have been published, and these excerpts only illustrate the particular fundamental subject in discussion. For further enlightenment the beginner should secure complete dance arrangements, which have been published, and rewrite the parts in score form. When doing this, he should thoroughly analyze the contents of the entire arrangement.

On the following pages will be found the separate parts of the Rhythmic Paraphrase, "Faust." These are to be rewritten in score form. The length of this arrangement is 167 written measures. When transcribing this arrangement in score form, it is first necessary to rule out the amount of measures needed on 12-line manuscript paper, similar to the examples shown in Chapter XXI. When inserting the parts, each page of score should be completed before proceeding with the next page. In some of the individual parts small notes appear. These need not be inserted in the score; they have only been cued in the individual parts for the purpose of publication. Such cuing is very practical for small combinations.

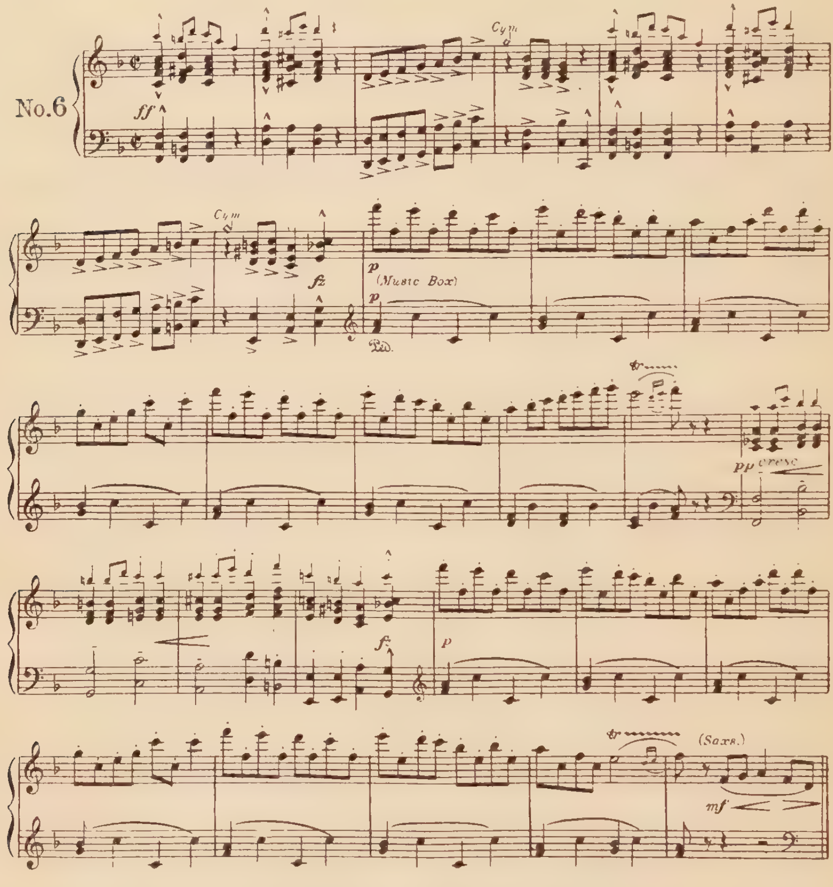
1
Rhythmic Paraphrases
of the Classics
For Dance, Theatre or
Symphony Orchestra

FAUST

Excerpts from the Opera
by
C. Gounod

By ARTHUR LANGE

Piano



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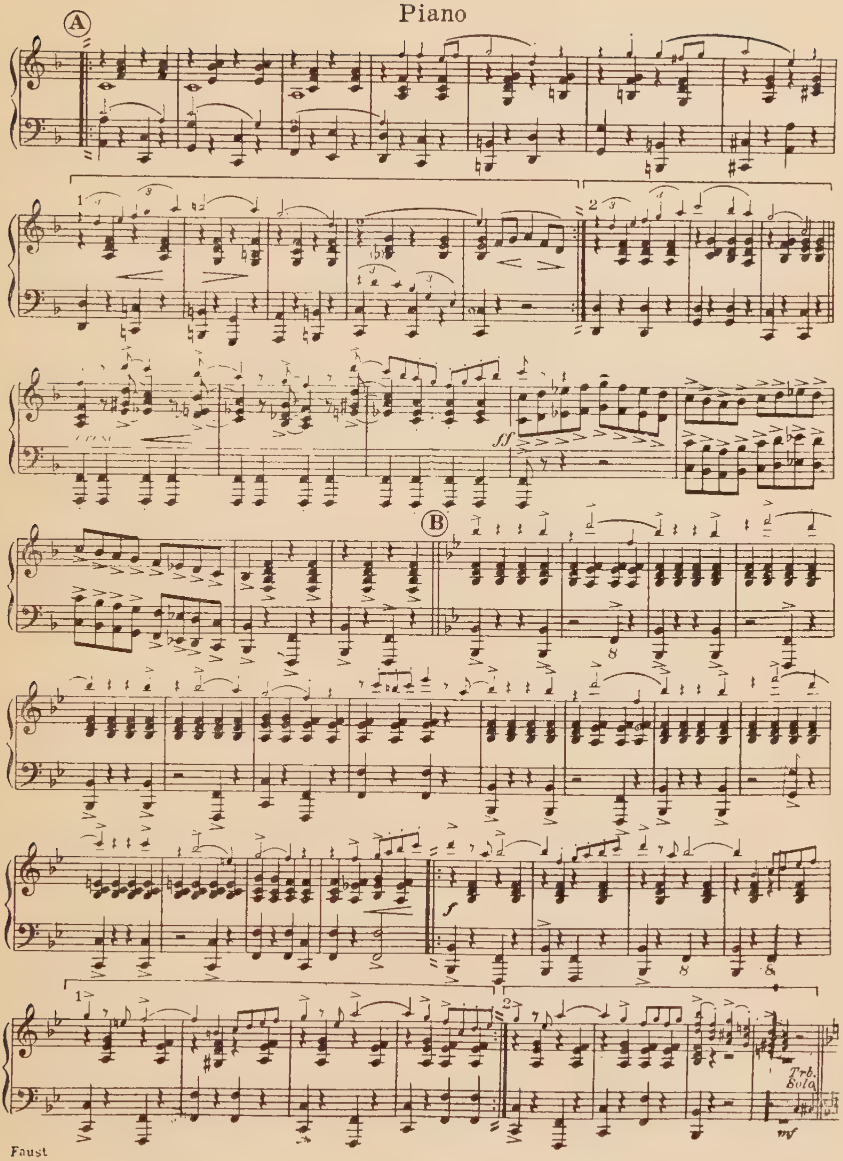
"JUNE" - "IL TROVATORE" - "SCARF DANCE" - "NAILA" and "TANNHAUSER"
16 parts and Piano, including Sax's and Banjo, $2.00 Net. Seperate parts, 15¢ each, Piano 35¢ each.
Dance Orchestra Edition, 10 parts and Piano, $1.50 Net

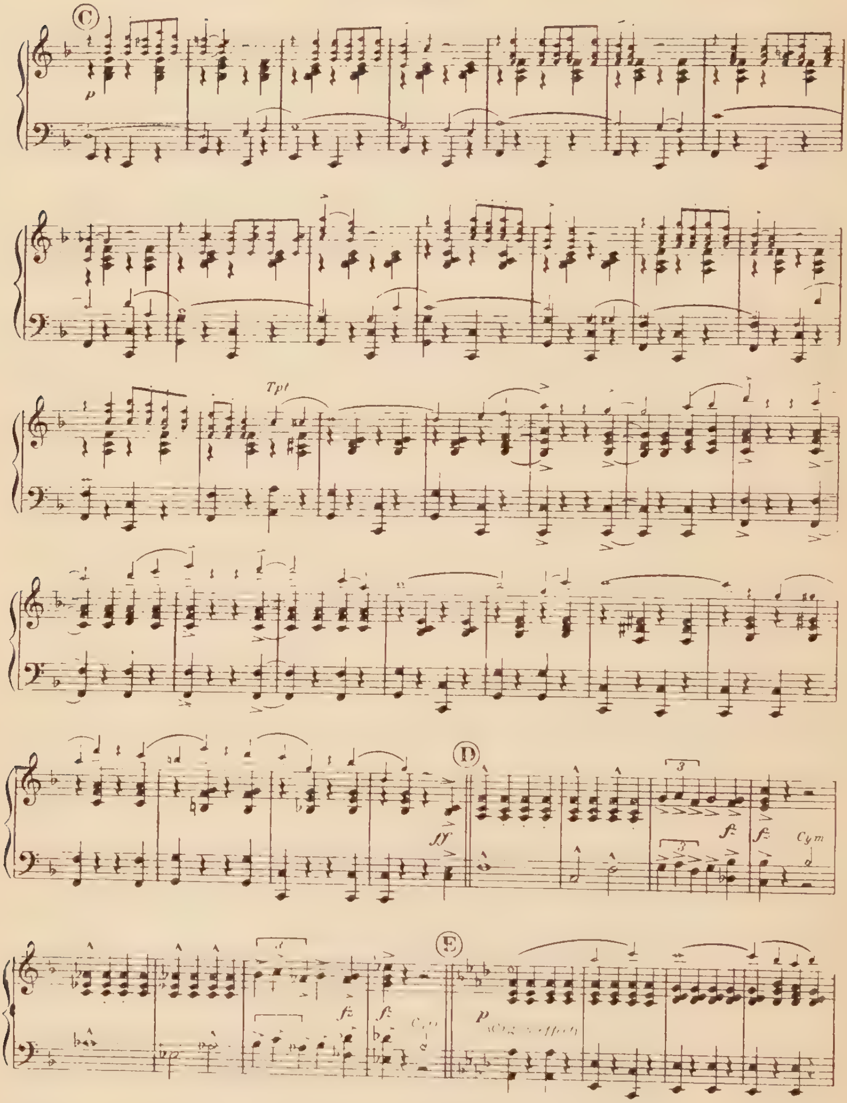
Piano



Faust

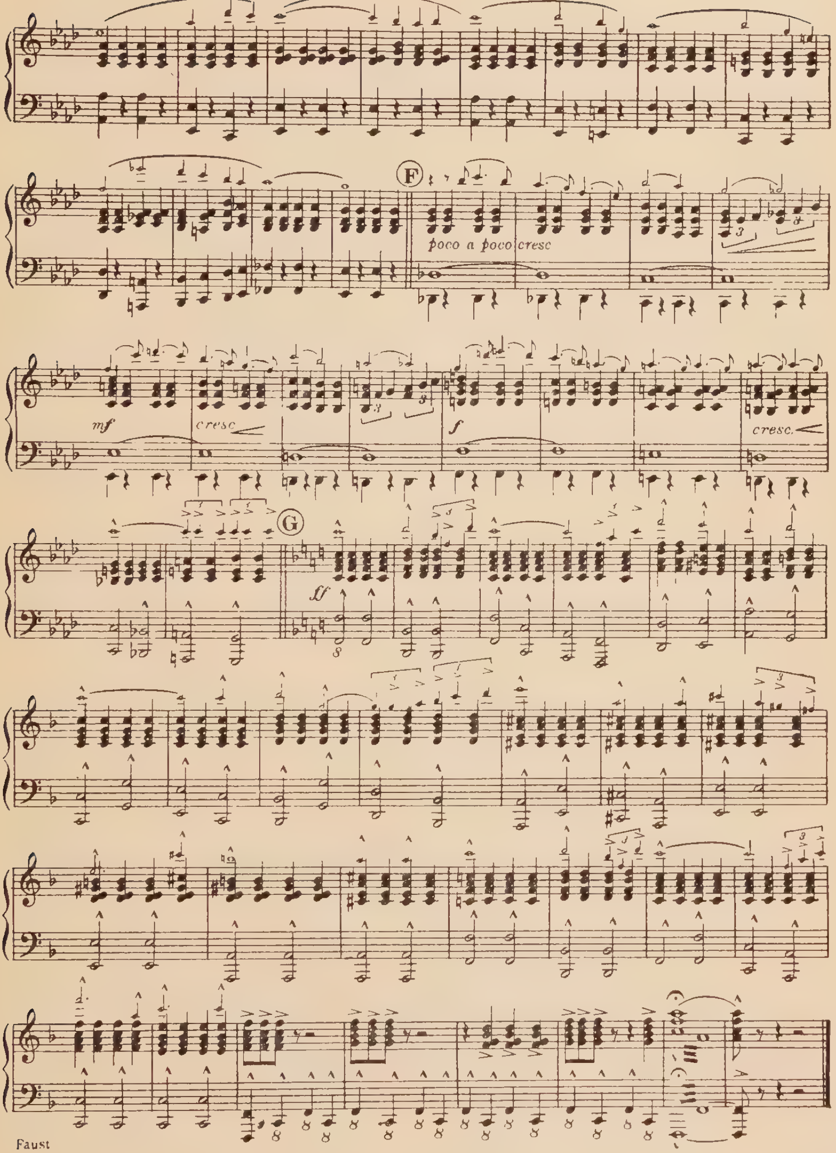
3

Piano



Faust

Piano

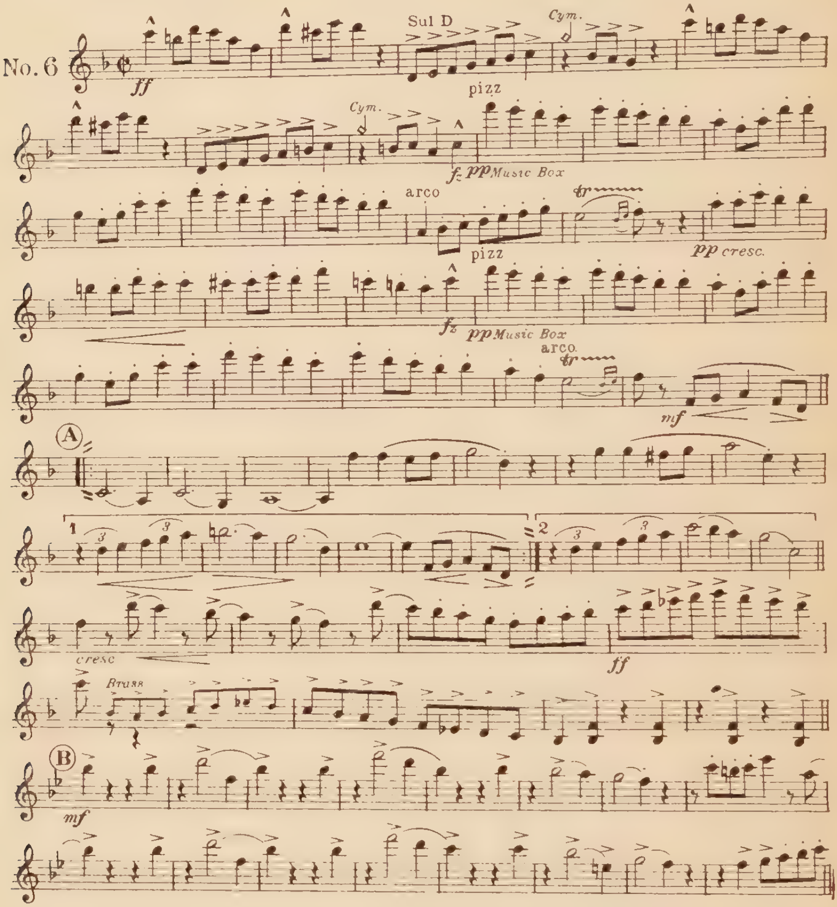


Rhythmic Paraphrases of the Classics
For Dance, Theatre or Symphony Orchestra
1st Violin

FAUST

Excerpts from the Opera
by
C. Gounod

By ARTHUR LANGE



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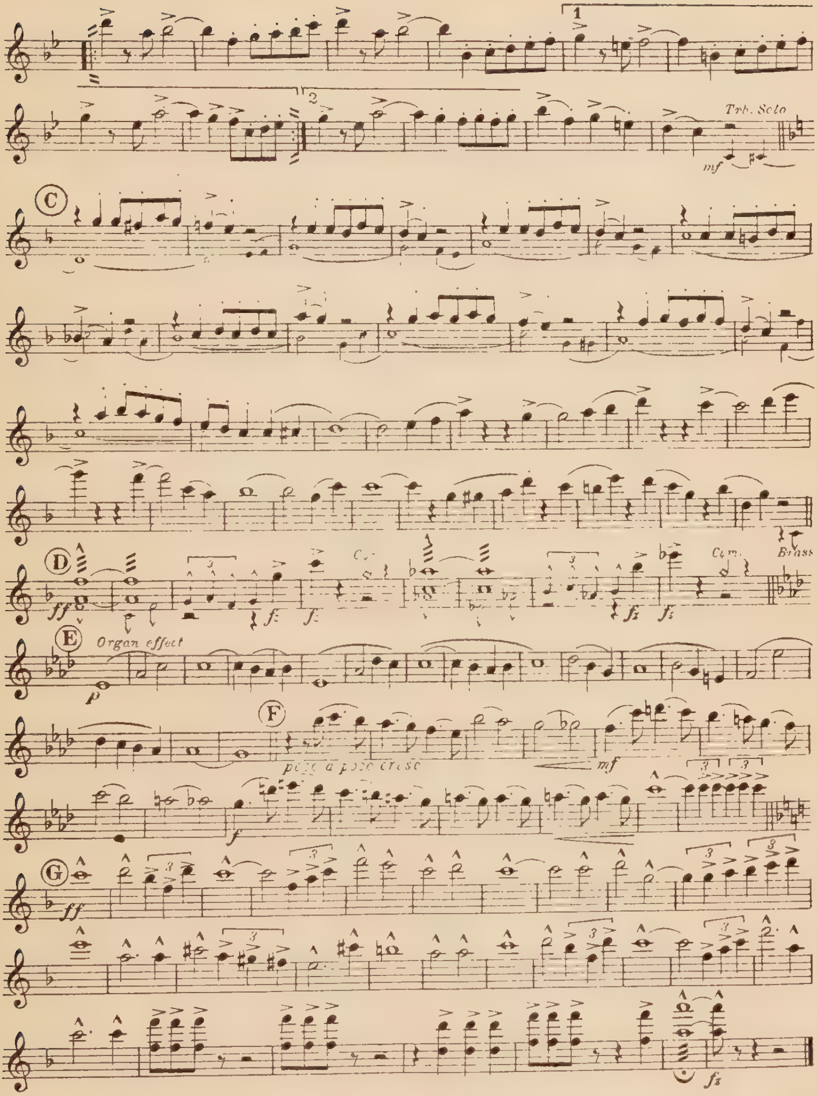
Dance Orchestra Edition, 10 parts and Piano $1.50 Net

1st Violin

3



Faust

Rhythmic Paraphrases of the Classics

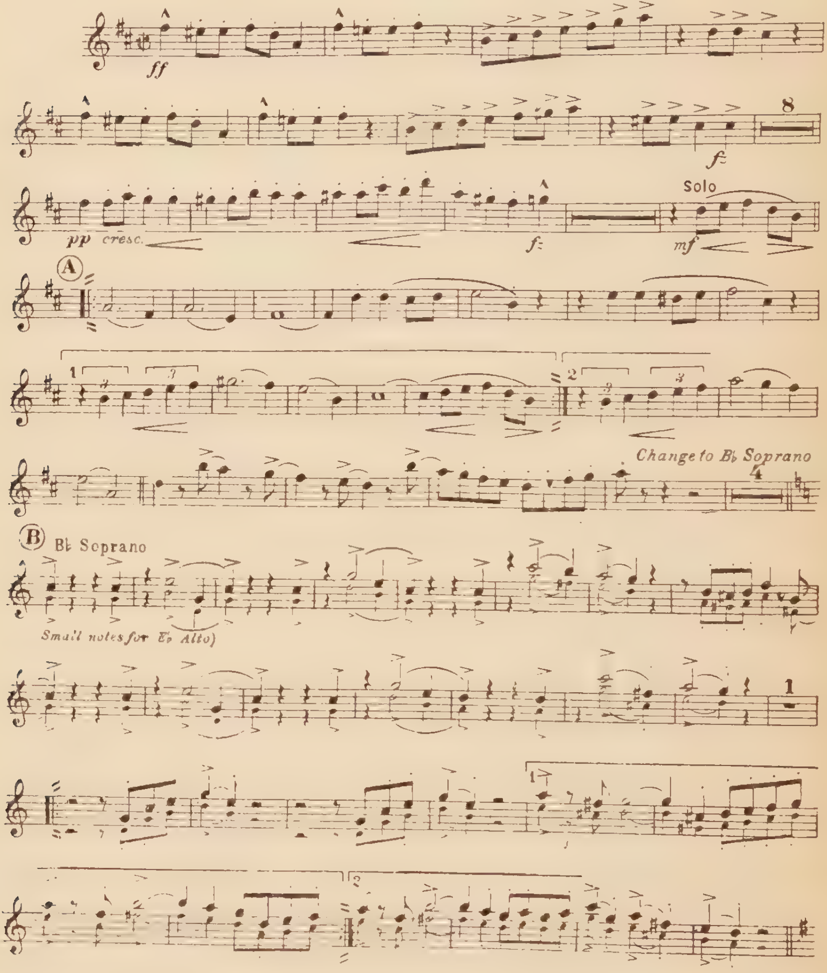
For Dance, Theatre or Symphony Orchestra

FAUST

Excerpts from the Opera
by
C. Gounod

By ARTHUR LANGE

1st Saxophone
E♭ Alto and B♭ Soprano



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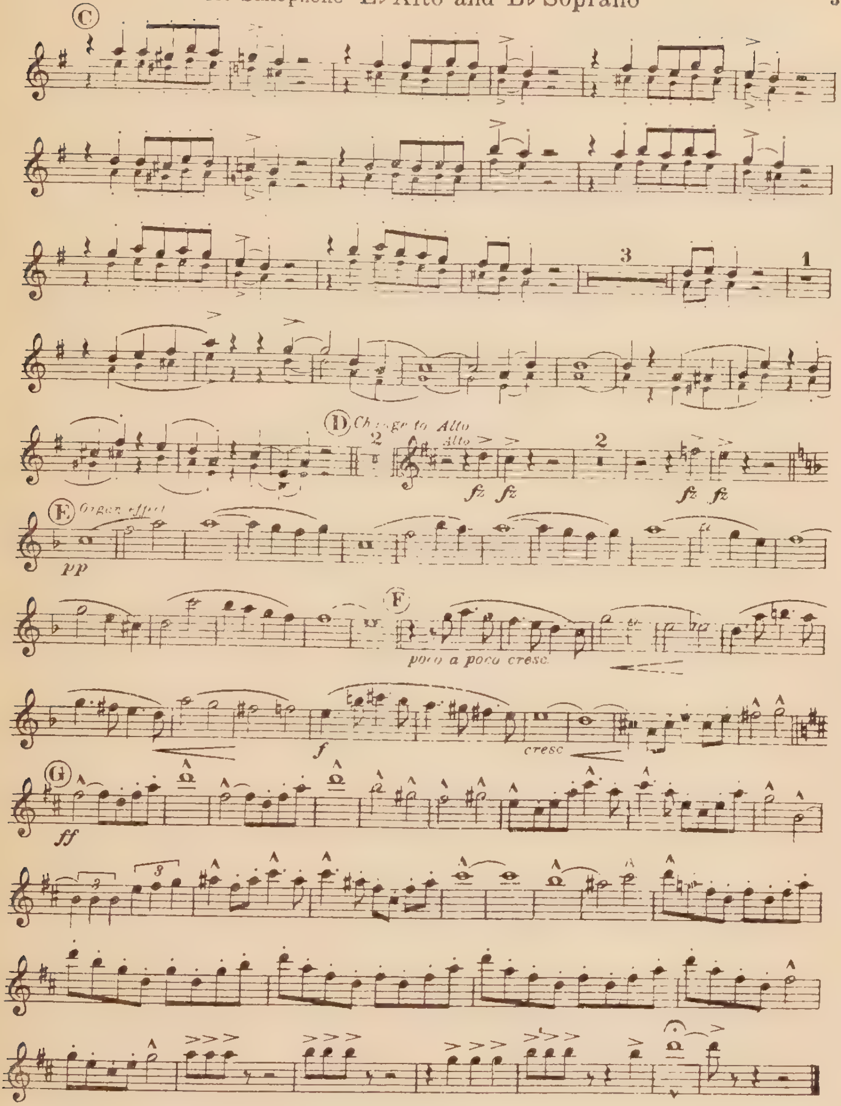
1st Saxophone E♭ Alto and B♭ Soprano 3



Faust

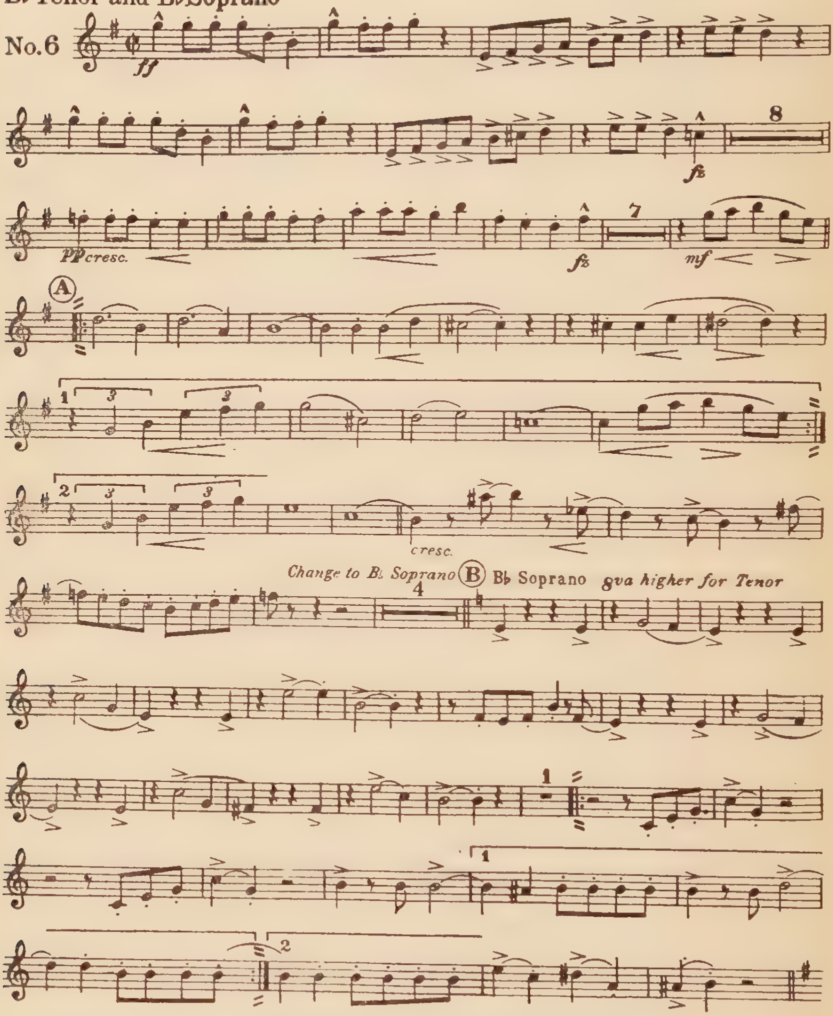
[2]Rhythmic Paraphrases
of the Classics
For Dance, Theatre or
Symphony Orchestra

2nd Saxophone
B♭ Tenor and B♭ Soprano

FAUST

Excerpts from the Opera
by
C. Gounod

By ARTHUR LANGE



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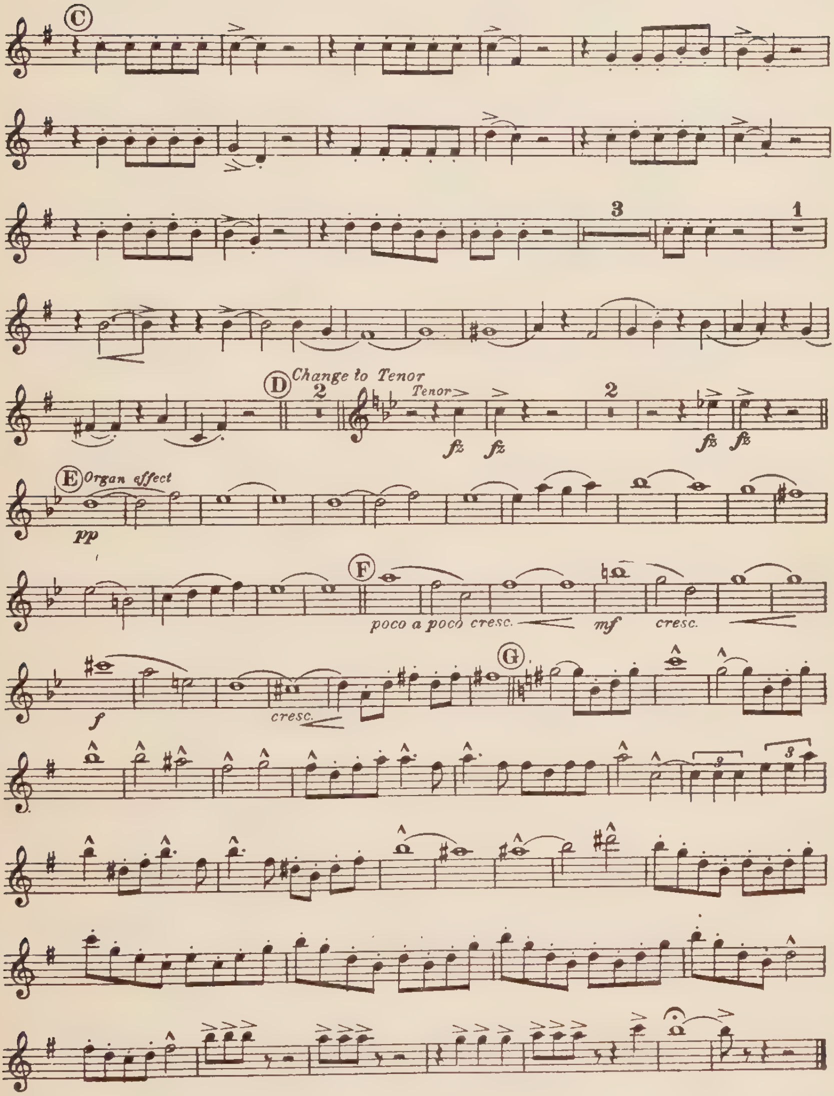
2nd Saxophone B♭ Tenor and B♭ Soprano

3



Faust

Rhythmic Paraphrases
of the Classics
For Dance, Theatre or
Symphony Orchestra

3rd Saxophone
Eb Alto

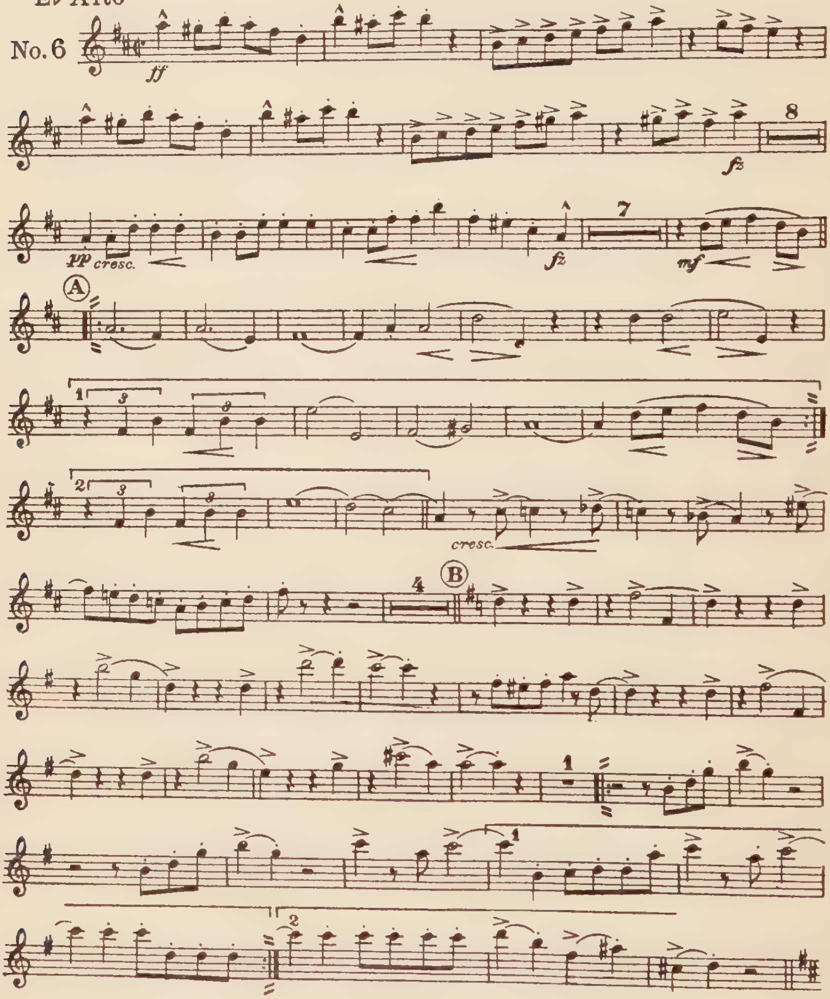
FAUST

Excerpts from the Opera

by
C. Gounod

By ARTHUR LANGE

No. 6



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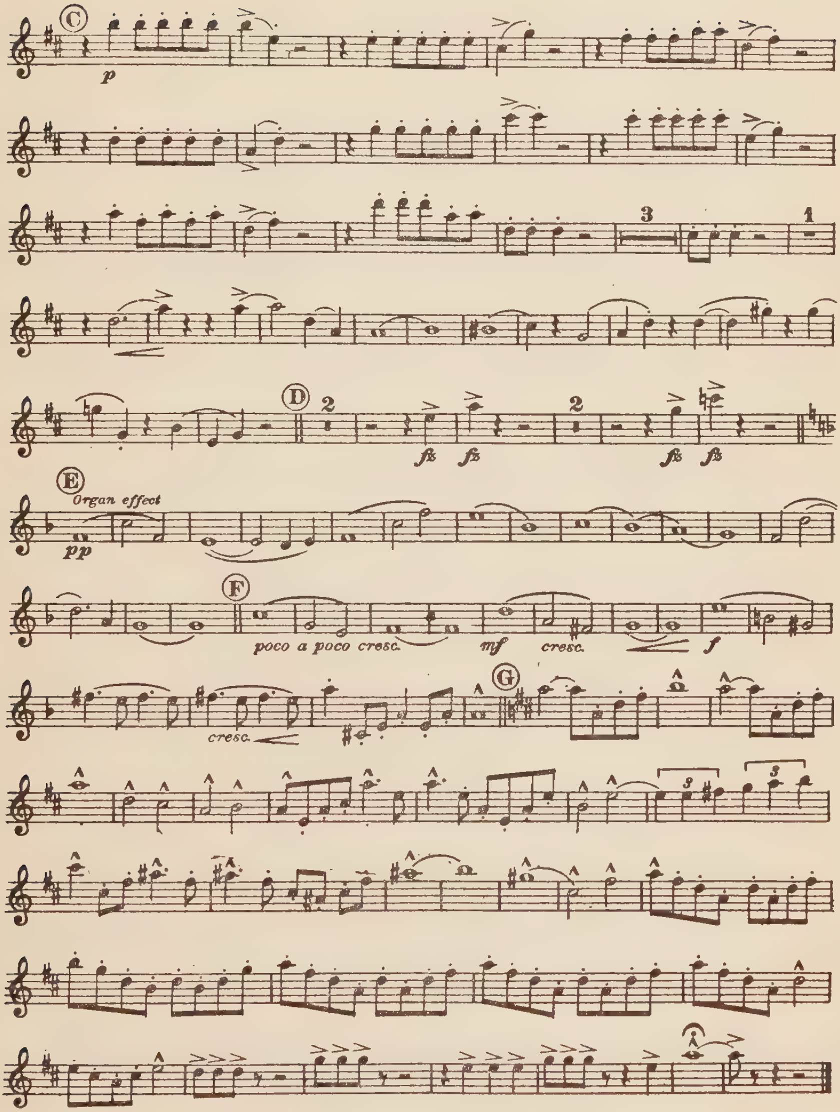
3rd Saxophone E♭ Alto



2 *Rhythmic Paraphrases of the Classics*
For Dance, Theatre or Symphony Orchestra

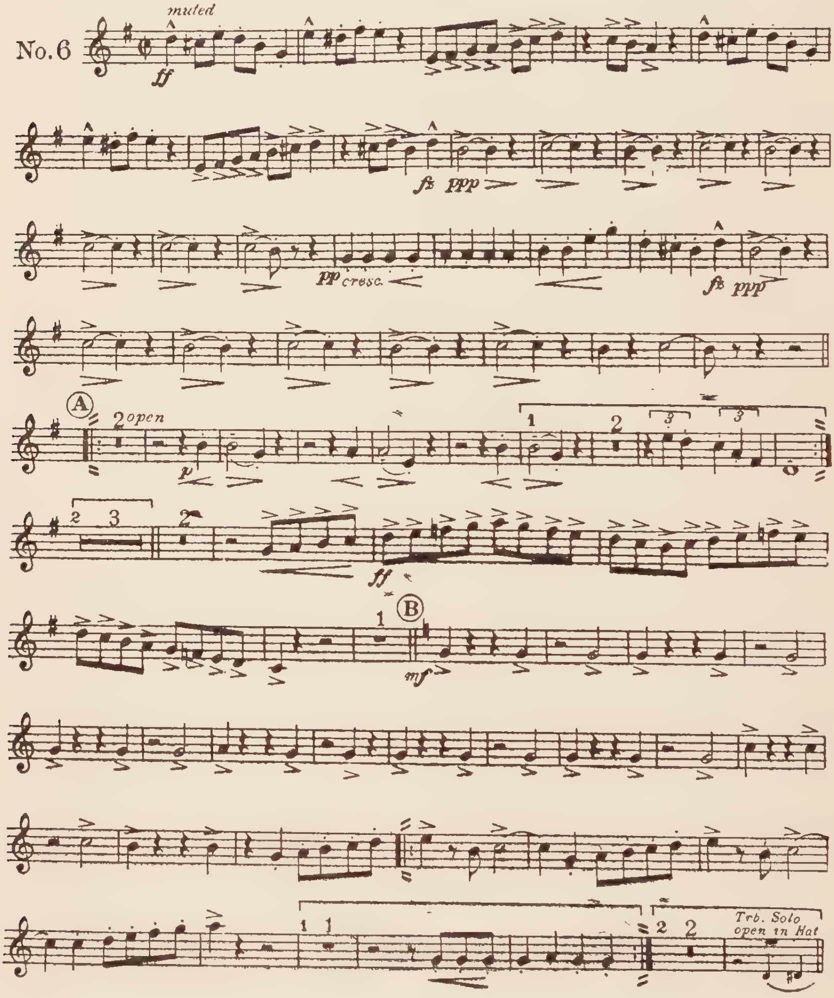
1st Trumpet in B♭

FAUST

Excerpts from the Opera
by
C. Gounod

By ARTHUR LANGE

No. 6



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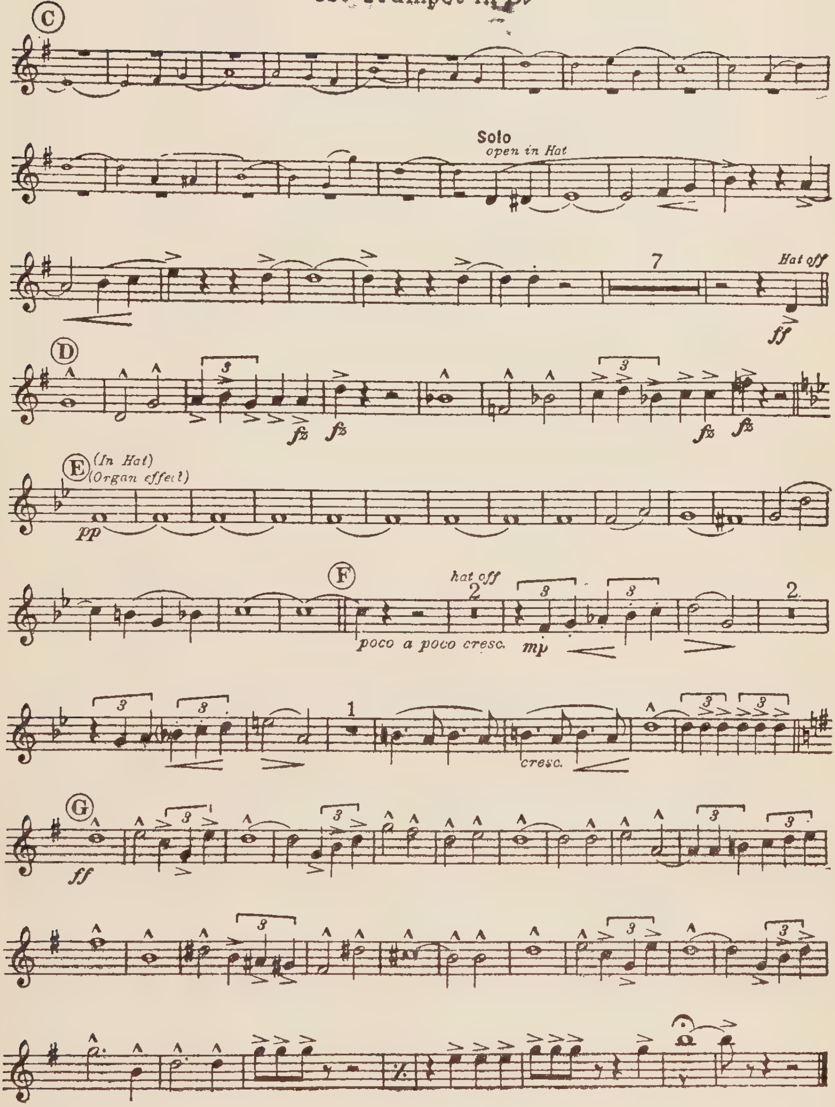
1st Trumpet in B♭



Faust

Rhythmic Paraphrases
of the Classics
For Dance, Theatre or
Symphony Orchestra

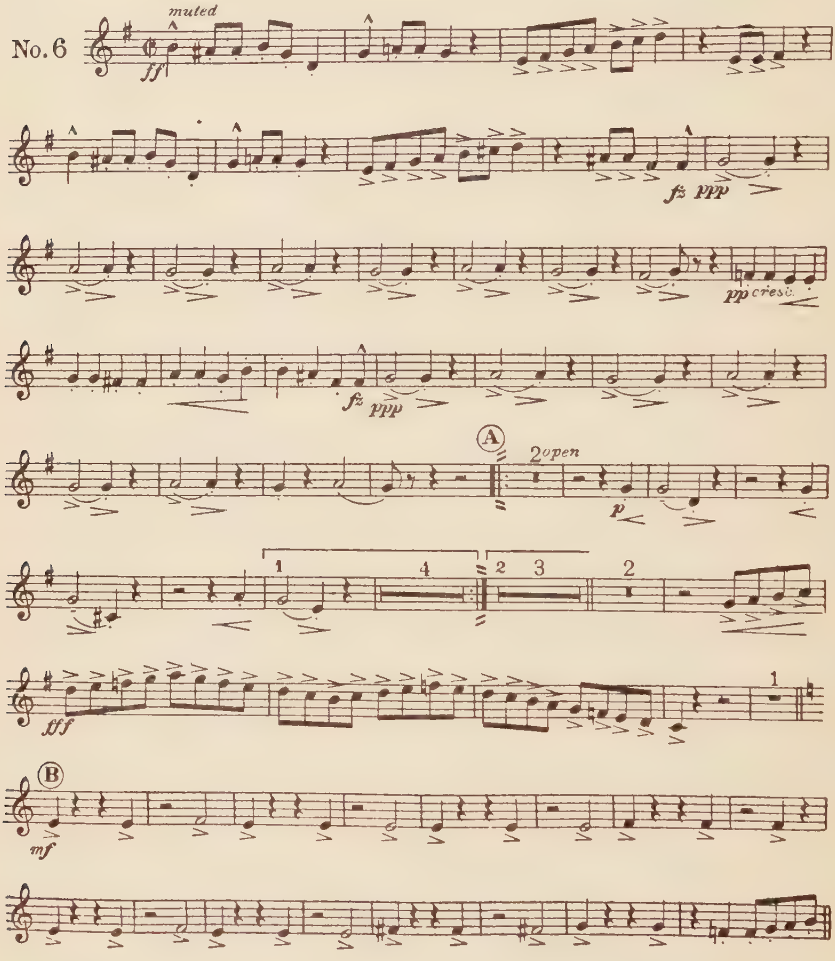
FAUST

Excerpts from the Opera
by
C. Gounod

2nd Trumpet in B♭

By ARTHUR LANGE

No. 6



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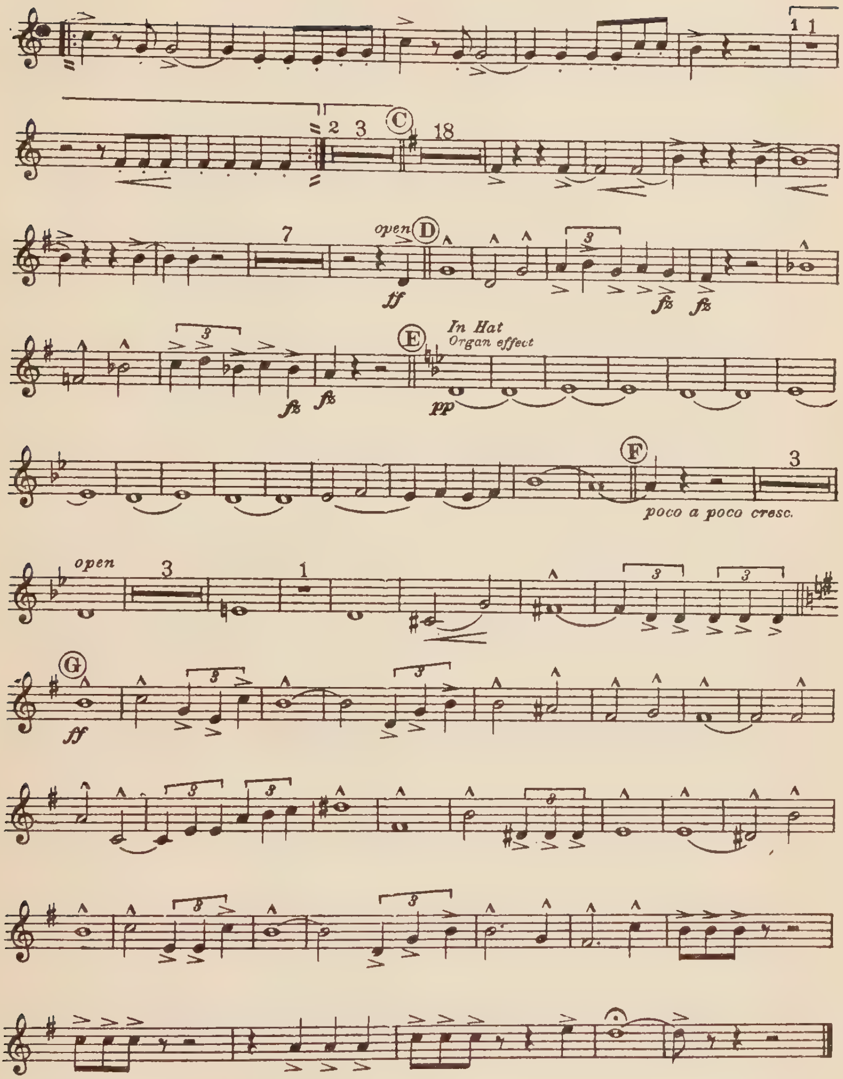
2nd Trumpet in B♭



Faust

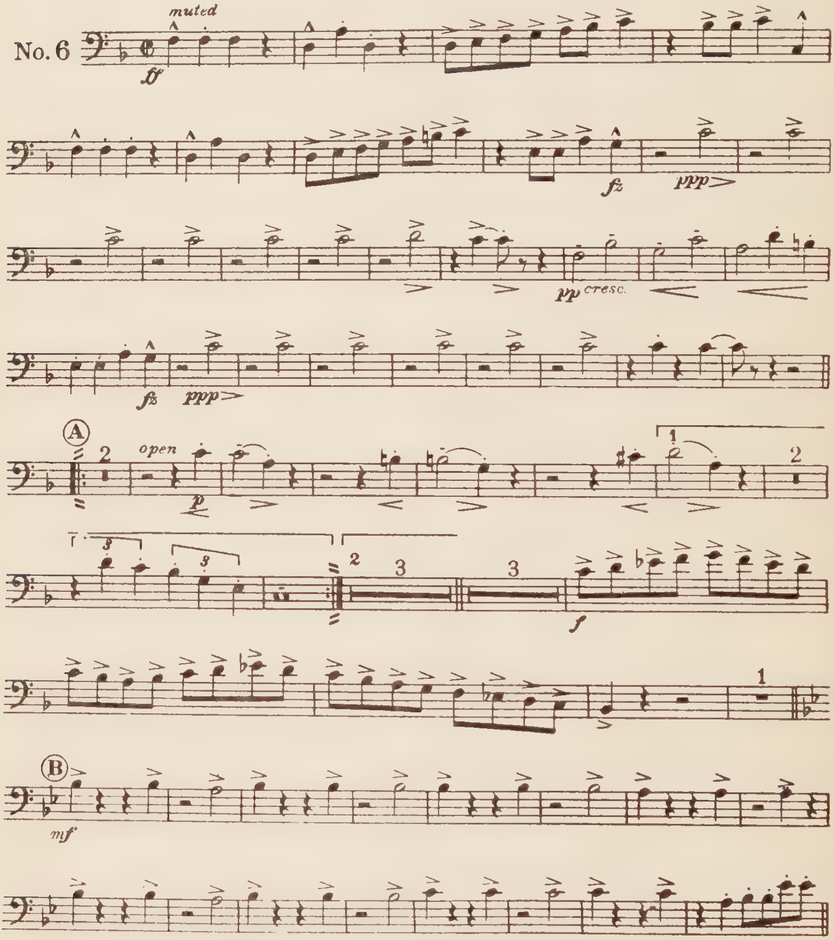
Rhythmic Paraphrases
of the Classics
For Dance, Theatre or
Symphony Orchestra

FAUST

Excerpts from the Opera
by
C. Gounod

1st Trombone

By ARTHUR LANGE



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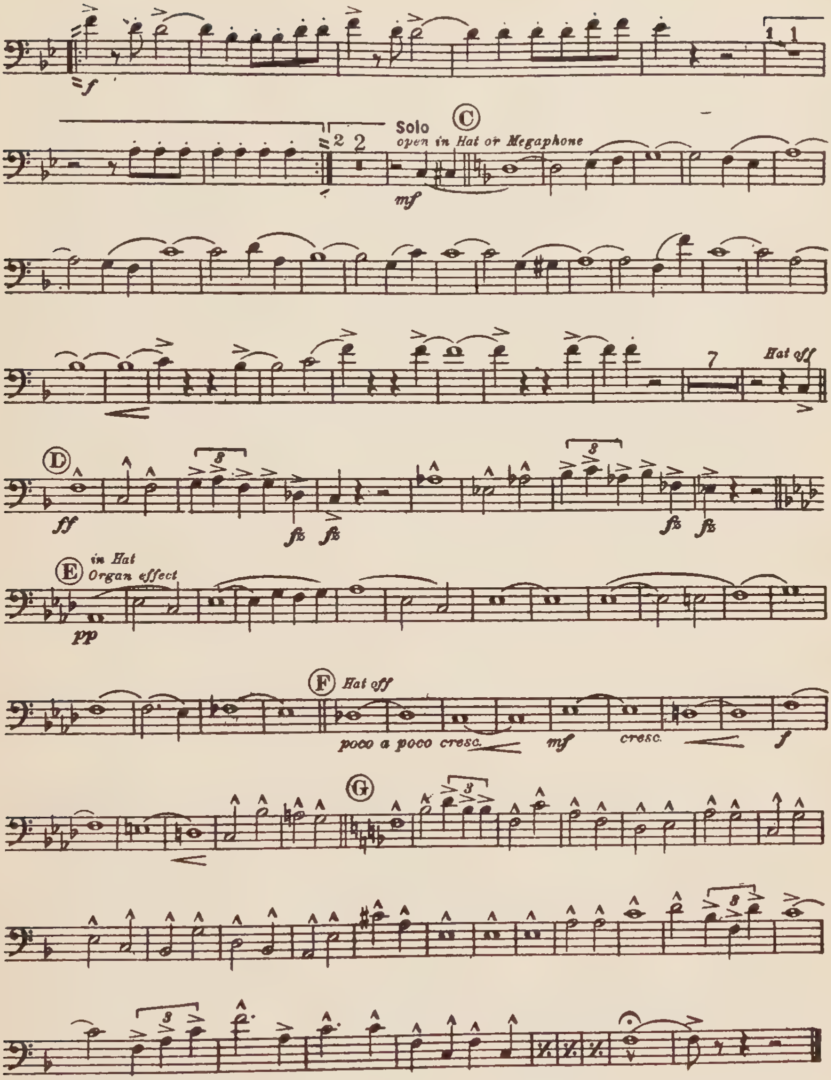
1st Trombone



Faust

Rhythmic Paraphrases, of the Classics
For Dance, Theatre or Symphony Orchestra

Bass

FAUST

Excerpts from the Opera
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C. Gounod

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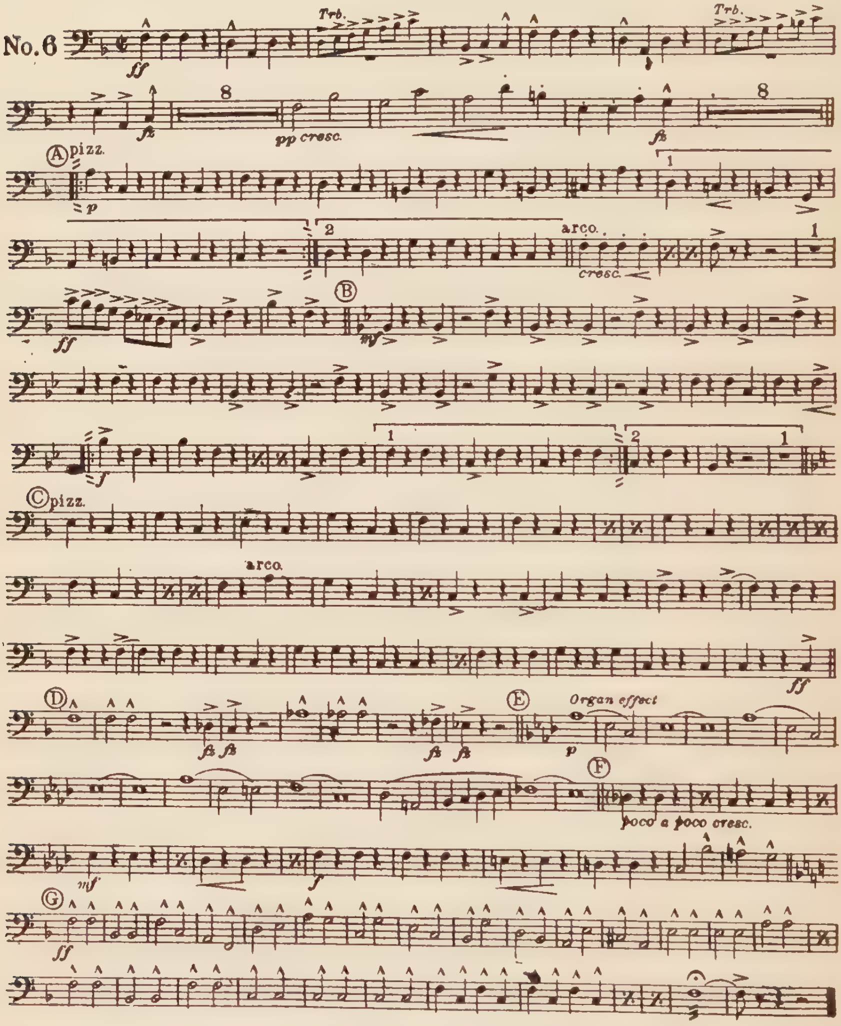

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Rhythmic Paraphrases of the Classics
For Dance, Theatre or Symphony Orchestra

Tenor Banjo

FAUST

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by
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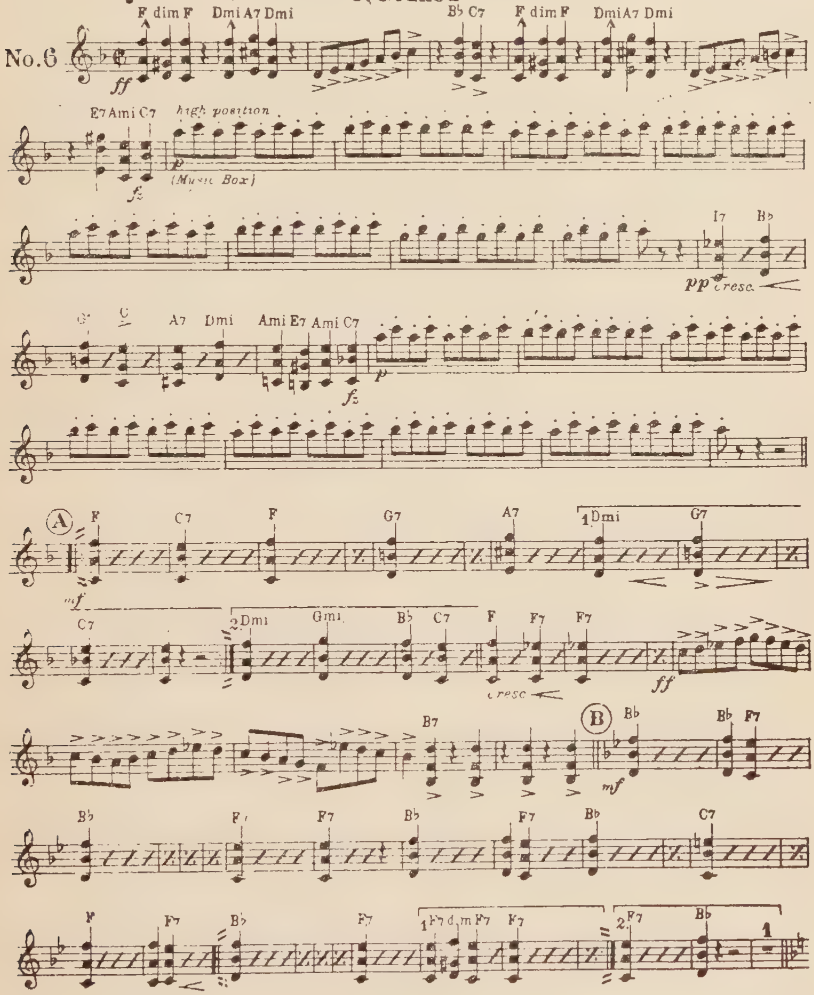

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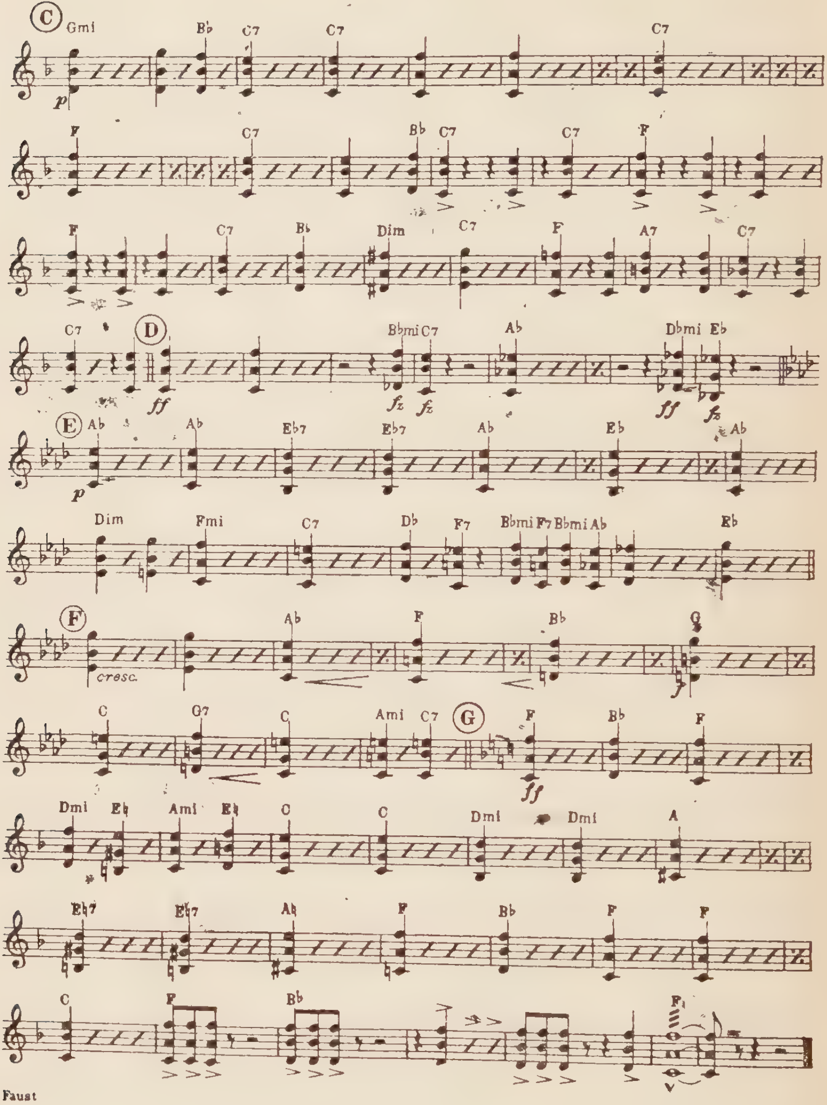
Tenor Banjo



Faust

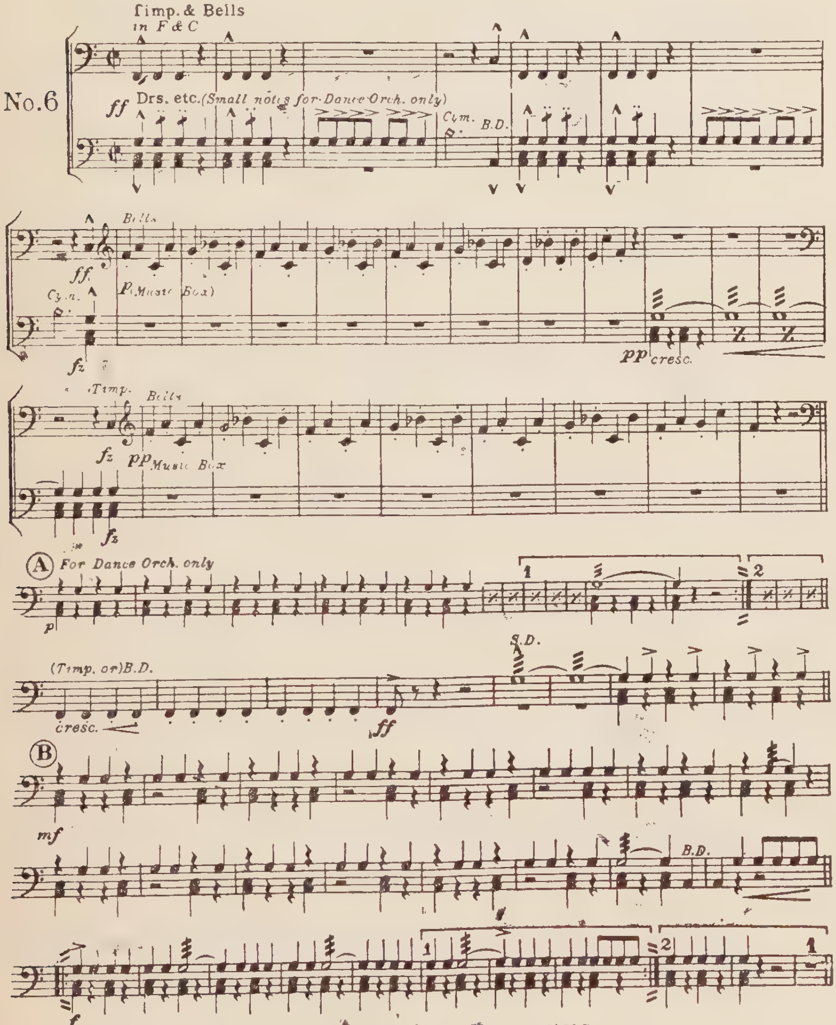
Rhythmic Paraphrases of the Classics
For Dance, Theatre or
Symphony Orchestra
Percussion

FAUST

Excerpts from the Opera

by
C. Gounod

By ARTHUR LANGE



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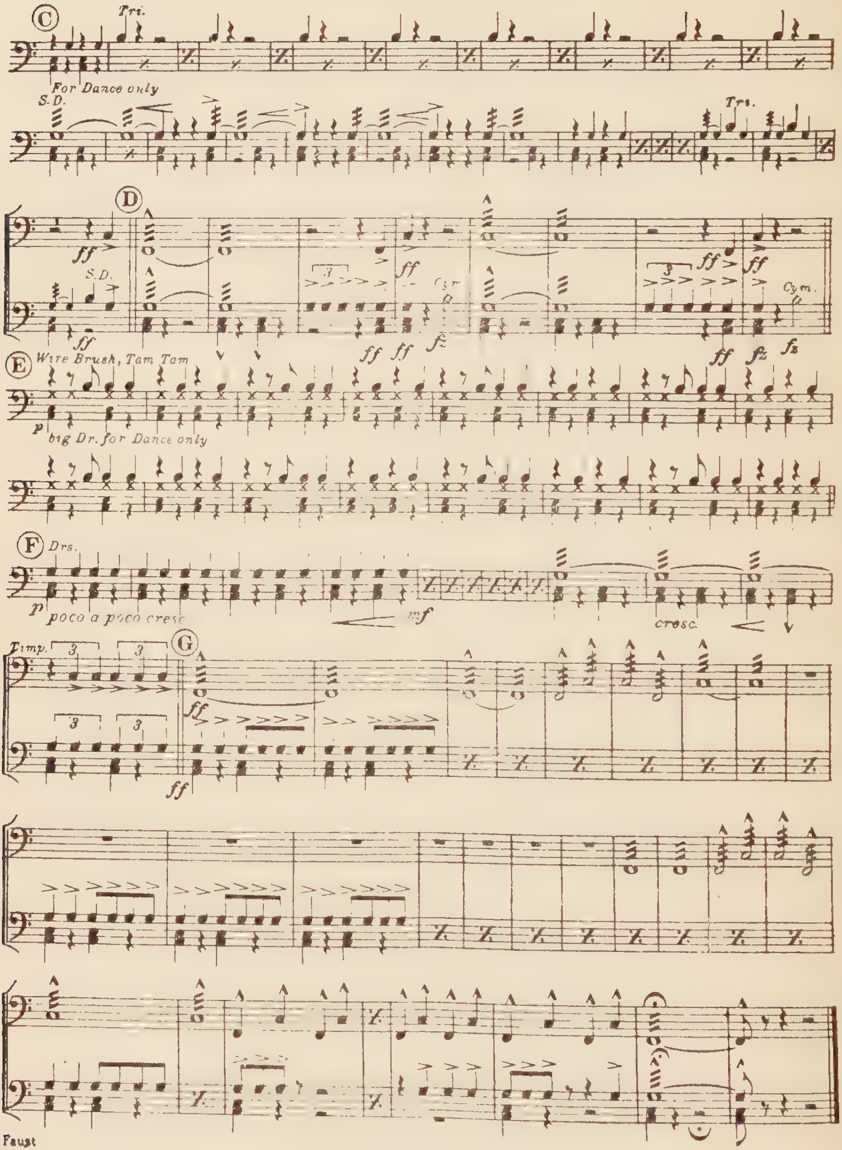
Percussion



Faust